

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO
FORM S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

ACCESS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

83-0221517
(I.R.S. Employer
Identification No.)

**2600 Stemmons Freeway, Suite 176
Dallas, Texas 75207
(214) 905-5100**

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

**Stephen B. Thompson
Chief Financial Officer
Access Pharmaceuticals, Inc.
2600 Stemmons Freeway, Suite 176
Dallas, Texas 75207
(214) 905-5100**

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

with a copy to:
**John J. Concannon III, Esq.
Bingham McCutchen LLP
One Federal Street
Boston, MA 02110
(617) 951-8000**

Approximate date of commencement of proposed sale to public: As soon as practicable after the effective date hereof.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box.

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

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

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

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

Larger accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting

company

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price	Amount of registration fee(1)
Common Stock	\$ 2,551,505.95(1)	\$ 181.92(2)
Total	\$ 2,551,505.95	\$ 181.92(2)

(1) Represents 1,041,431 shares of common stock that may be issued upon exercise of certain common stock purchase warrants. All of the shares are offered by the Selling Stockholders. Accordingly, this registration statement includes an indeterminate number of additional shares of common stock issuable for no additional consideration pursuant to any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration, which results in an increase in the number of outstanding shares of our common stock. In the event of a stock split, stock dividend or similar transaction involving our common stock, in order to prevent dilution, the number of shares registered shall be automatically increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act of 1933.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933. For the purposes of this table, we have used the average of the high and low prices as reported on the OTC Bulletin Board on April 9, 2010.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SECTION 8(A), MAY DETERMINE.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 to Registration Statement on Form S-1 (333-162687) is being filed to include in the prospectus contained herein the "Selling Stockholders" table and disclosure with respect to the resale registration of 1,041,431 shares of our common stock underlying certain common stock warrants. This amendment is also being filed to update certain other disclosure in the prospectus to, among other things, include audited financial statements for our fiscal year ended December 31, 2009 and to reflect additional information disclosed in our Annual Report on Form 10-K (the "Annual Report") for our fiscal year ended December 31, 2009.

INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL AND IS NOT A SOLICITATION OF AN OFFER TO BUY IN ANY STATE IN WHICH AN OFFER, SOLICITATION, OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED APRIL 12, 2010

PROSPECTUS

2,082,870 UNITS, EACH CONSISTING OF
2,082,870 SHARES OF COMMON STOCK AND
1,041,431 WARRANTS

We previously issued and sold 2,082,870 units, each unit consisting of 1.0 share of our common stock and warrants to purchase an additional 0.5 share of our common stock. Each warrant entitles its holder to purchase one share of our common stock at an exercise price of \$3.00 per share. The units will separate immediately and the common stock and warrants will be issued separately and the common stock will trade separately. The offering unit expired on January 26, 2010.

This Prospectus relates to the offer and sale of up to 1,041,431 shares of our common stock by certain of our stockholders, named under the "Selling Stockholders" table on page 16. We are not selling any of these shares of common stock, which shares represent the shares of common stock to be issued upon the exercise of certain common stock warrants which were issued as part of the units and described in this Prospectus. And as a result, we will not receive any proceeds from any offering of common stock by the "Selling Stockholders". We will pay all costs associated with this registration statement.

Our common stock is presently listed on the Over-the-counter Bulletin Board under the symbol "ACCP". We do not intend to apply for listing of the warrants on any securities exchange. On April 9, 2010, the last reported sale price of our common stock on the OTC BB was \$2.50 per share.

INVESTING IN THE OFFERED SECURITIES INVOLVES RISKS, INCLUDING THOSE SET FORTH IN THE "RISK FACTORS" SECTION OF THIS PROSPECTUS BEGINNING ON PAGE 6.

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

Brokers or dealers effecting transactions in these shares should confirm that the shares are registered under the applicable state law or that an exemption from registration is available.

No underwriter or person has been engaged to facilitate the sale of shares of common stock in this offering. None of the proceeds from the sale of stock by the selling stockholders will be placed in escrow, trust or any similar account.

**These securities are speculative and involve a high degree of risk.
You should purchase securities only if you can afford a complete loss of your investment.**

See “Risk factors” beginning on page 6.

THE DATE OF THIS PROSPECTUS IS APRIL __, 2010.

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PROSPECTUS SUMMARY

ACCESS PHARMACEUTICALS, INC.

1,041,431 SHARES OF COMMON STOCK

ABOUT THIS PROSPECTUS

This summary highlights certain information appearing elsewhere in this prospectus. For a more complete understanding of this offering, you should read the entire prospectus carefully, including the risk factors and the financial statements. References in this prospectus to “we,” “us,” “our,” “Company” and “Access” refer to Access Pharmaceuticals, Inc. You should read both this prospectus and any prospectus supplement together with additional information described below under the heading “Where You Can Find More Information”.

ABOUT ACCESS

Company Overview

Access Pharmaceuticals, Inc. (together with our subsidiaries, “We”, “Access” or the “Company”) is a Delaware corporation. We are an emerging biopharmaceutical company focused on developing a range of pharmaceutical products primarily based upon our nanopolymer chemistry technologies and other drug delivery technologies. We currently have one approved product, two products at Phase 2 of clinical development and several products in pre-clinical development. Low priority clinical and pre-clinical programs will be dependent upon our ability to enter into collaborative arrangements. Certain of our development programs are dependent upon our ability to secure approved funding for such projects. Our description of our business, including our list of products and patents, takes into consideration our acquisition of MacroChem Corporation which closed February 25, 2009.

- MuGard™ is our approved product for the management of oral mucositis, a frequent side-effect of cancer therapy for which there is no established treatment. The market for mucositis treatment is estimated to be in excess of \$1 billion world-wide. MuGard, a proprietary nanopolymer formulation, has received marketing allowance in the U.S. from the Food & Drug Administration (FDA). MuGard has been launched in Germany, Italy, UK, Greece and the Nordic countries by our European commercial partner, SpePharm. Our manufacturing of MuGard is underway as we expect to launch MuGard in North America during the second quarter of 2010. We are working with our partners in Korea and China for marketing.
- Our lead development candidate for the treatment of cancer is ProLindac™, a nanopolymer DACH-platinum prodrug. We recently completed a Phase 2 clinical trial on ProLindac in the EU in patients with recurrent ovarian cancer. The clinical study had positive safety and efficacy results. On January 7, 2010, we announced that we are initiating a study of ProLindac combined with Paclitaxel in second line treatment of platinum pretreated advanced ovarian cancer patients. This multi-center study of up to 25 evaluable patients will be conducted in Europe. We are also currently planning a number of combination trials, looking at combining ProLindac with other cancer agents in solid tumor indications including colorectal and ovarian cancer. The DACH-platinum incorporated in ProLindac is the same active moiety as that in oxaliplatin (Eloxatin; Sanofi-Aventis), which has sales in excess of \$2.0 billion.
- Thiarabine, or 4-thio Ara-C, is a next generation nucleoside analog licensed from Southern Research Institute. Previously named SR9025 and OSI-7836, the compound has been in two Phase 1/2 solid tumor human clinical trials and was shown to have anti-tumor activity. We are working with leukemia and lymphoma specialists at MD Anderson Cancer Center in Houston and intend to initiate additional Phase 2 clinical trials in adult AML, ALL and other indications.
- Cobalamin™ is our proprietary preclinical nanopolymer oral drug delivery technology based on the natural vitamin B12 oral uptake mechanism. We are currently developing a product for the oral delivery of insulin, and have conducted sponsored development of a product for oral delivery of human growth hormone. We are in discussion with several companies regarding the sponsored development of Cobalamin oral drug delivery formulations of proprietary and non-proprietary actives.

- Cobalamin-mediated cancer targeted delivery is a preclinical technology which makes use of the fact that cell surface receptors for vitamins such as B12 are often overexpressed by cancer cells. This technology uses nanopolymer constructs to deliver more anti-cancer drug to tumors while protecting normal tissues.

Products and Product Candidates

We use our drug delivery technologies to develop the following products and product candidates:

Access Drug Portfolio

Compound	Originator	Technology	Indication	Clinical Stage (1)
MuGard™	Access	Mucoadhesive liquid	Mucositis	(510k) Marketing clearance received
ProLindac™ (Polymer Platinite, AP5346) (2)	Access / Univ of London	Synthetic polymer	Cancer	Phase 2
Thiarabine (4-thio Ara-C) (3)	Southern Research Institute	Small molecule	Cancer	Phase 1/2
Oral Insulin	Access	Cobalamin	Diabetes	Pre-clinical
Oral Delivery System	Access	Cobalamin	Various	Pre-clinical
Cobalamin™-Targeted Therapeutics	Access	Cobalamin	Anti-tumor	Pre-clinical

(1) For more information, see “Government Regulation” for description of clinical stages.

(2) Licensed from the School of Pharmacy, The University of London.

(3) Licensed from Southern Research Institute of Birmingham, Alabama.

Other Key Developments

On January 22, 2010, we announced the sale of approximately 2.10 million shares of our common stock and warrants to purchase approximately 1.05 million shares of our common stock for gross proceeds of approximately \$6.3 million. We sold these shares and warrants as a combined unit for \$3.00 per unit (each unit consisting of one share and a warrant to purchase 0.5 shares of common stock). The exercise price of the warrants is \$3.00 per share.

On January 7, 2010, we announced that we completed enrollment and evaluation of the last additional cohort of patients in the ongoing clinical study of ProLindac as a monotherapy in ovarian cancer patients who received at least two prior platinum based treatment regimens. The additional cohort of 8 patients received the ProLindac batch made by an improved scalable process, which will be used on a larger scale for future clinical and commercial supplies. None of the 8 patients experienced any acute significant adverse events, while treatment had the same beneficial pharmacodynamic effect seen in the first 26 patients treated with the former ProLindac production batch; clinically relevant sustained biomarker decrease (responses by Rustin's criteria) and disease stabilization were seen in several patients. The overall results of our Phase 1/2 exploratory single agent ProLindac study have helped define multiple safe dosing regimens, while the level of patient cohort accrued in the study antitumor activity was as expected in this very heavily pretreated patient cohort.

On December 15, 2009, we announced the appointment of Frank Jacobucci to the position of Vice President, Sales and Marketing. Mr. Jacobucci will be primarily responsible for our marketing launch of MuGard.

On October 6, 2009, we announced that we signed an agreement with iMedicor for the North American launch of MuGard. iMedicor's highly targeted Alerts System application would introduce MuGard by the end 2009 to the 216,000 selected physicians in the United States.

On September 11, 2009, we announced the appointment of Accupac, Inc. as our U.S. manufacturer for MuGard.

On August 3, 2009, we announced that we commenced a new clinical study of ProLindac in France. The study examined dose levels and regimens of ProLindac monotherapy in cancer patients, provided additional data to support design of combinations studies, and extend the safety database.

On July 29, 2009, we announced that we are evaluating strategic options for the commercialization of MuGard in North America.

On July 23, 2009, we announced that our European partner, SpePharm, is collecting data from a post approval study of MuGard in head and neck cancer patients undergoing radiation treatment in the UK showing prevention of oral mucositis. In a multi-center study expected to enroll a total of 280 patients, patients are being provided with seven weeks of MuGard therapy, and begin using MuGard one week prior to radiation treatment and then throughout the subsequent six weeks of planned therapy. The first 140 patients being treated in this assessment study have been enrolled and treated, and as of the time of the update, none of these patients experienced any oral mucositis.

On July 7, 2009, we announced new preclinical data demonstrating that thiarabine shows remarkable efficacy in the prevention and treatment of rheumatoid arthritis (RA). In a well-established animal model for RA, an exceptional restoration of joint structure was observed in the studies, which were conducted at Wayne State University School of Medicine and at Southern Research Institute.

On June 17, 2009, we announced that we signed evaluation agreements with two biopharmaceutical companies for our Cobalamin™ Oral Drug Delivery Technology. Under the terms of the agreements, both companies plan to evaluate our oral insulin product in preclinical models as a prerequisite to entering licensing discussions.

On February 25, 2009, we closed our previously announced acquisition of MacroChem Corporation.

Corporate Information

We were incorporated in Wyoming in 1974 as Chemex Corporation, and in 1983 we changed our name to Chemex Pharmaceuticals, Inc. We changed our state of incorporation from Wyoming to Delaware on June 30, 1989. In 1996 we merged with Access Pharmaceuticals, Inc., a private Texas corporation, and changed our name to Access Pharmaceuticals, Inc. Our principal executive office is located at 2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207; our telephone number is (214) 905-5100.

SUMMARY OF THE OFFERING

Securities offered:	1,041,432 shares of common stock issuable upon the exercise of certain common stock purchase warrants issued to the selling stockholders.
Offering Price:	To be determined by the prevailing market price for the shares at the time of the sale or in negotiated transactions.
Description of Warrants:	The warrants have an exercise price of \$3.00 per share.
Common stock outstanding as of April 9, 2010:	15,382,755 shares.
Use of proceeds:	We will not receive proceeds from the resale of shares by the selling shareholders.
OTC BB Symbol:	ACCP.OB
Risk Factors:	See "Risk Factors" beginning on page 6 and the other information in this prospectus for a discussion of the factors you should consider before you decide to invest in the units.

The total number of shares of our common stock outstanding is 15,382,755 and excludes the following:

- 1,737,971 shares of common stock reserved for future issuance under our equity incentive plans. As of April 9, 2010, there were options to purchase 1,610,617 shares of our common stock outstanding under our equity incentive plans with a weighted average exercise price of \$2.58 per share;
- 9,800,025 shares of common stock issuable upon exercise of outstanding warrants as of April 9, 2010 with exercise prices ranging from \$1.32 per share to \$69.57 per share; and
- 1,166,540 shares of common stock that will be issued upon exercise of warrants at an exercise price of \$3.00-3.75 per share sold as part of the units in this offering.
- 9,951,198 shares of our common stock initially issuable upon conversion of Series A Cumulative Convertible Preferred Stock, subject to adjustment; and
- the conversion of our currently outstanding Convertible Note.

All information in this prospectus assumes the placement agent does not sell any units contained in the over-allotment option.

SUMMARY CONDENSED CONSOLIDATED FINANCIAL INFORMATION

The following summary selected condensed consolidated financial information as of and for the years ended December 31, 2009 and 2008, have been derived from our audited financial statements. The condensed consolidated financial information set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and notes thereto included elsewhere in this prospectus.

On February 25, 2009, we closed our acquisition of MacroChem Corporation through the issuance of an aggregate of approximately 2.5 million shares of our common stock. The acquisition was recorded similar to the pooling-of-interest method and the financial information for all periods presented reflects the financial statements of the combined companies in accordance with Financial Accounting Standards Board standards on business combinations for entities under common control.

<u>(in thousands, except per share amounts)</u>	For the Year Ended December 31,	
	2009	2008
Consolidated Statements of Operations:		
Total revenues	\$ 352	\$ 291
Loss from operations	(9,676)	(30,731)
Interest and miscellaneous income	29	211
Interest and other expense	(539)	(911)
Loss on change in fair value of derivative	(7,154)	-
Net loss	(17,340)	(31,431)
Preferred stock dividends	(1,886)	(3,358)
Net loss allocable to common stockholders	\$ (19,226)	\$ (34,789)
Common Stock Data:		
Net loss per basic and diluted common share	\$ (1.63)	\$ (4.16)
Weighted average basic and diluted common shares outstanding	11,819	8,354
	December 31,	
	2009	2008
Consolidated Balance Sheet Data:		
Cash and cash equivalents	\$ 607	\$ 2,677
Total assets	1,583	4,171
Deferred revenue	5,077	2,409
Notes payable	-	825
Derivative liability	9,708	-
Convertible notes	5,500	5,500
Total liabilities	28,572	15,357
Total stockholders' deficit	(26,989)	(11,186)

RISK FACTORS

Any investment in our securities involves a high degree of risk. You should carefully consider the risks described below, which we believe represent certain of the material risks to our business, together with the information contained elsewhere in this Prospectus, before you make a decision to invest in our units. If any of the following events occur, our business, financial condition and operating results may be materially adversely affected. In that event, the trading price of our securities could decline and you could lose all or part of your investment.

Risks relating to our business and industry

Without obtaining adequate capital funding, we may not be able to continue as a going concern.

The report of our independent registered public accounting firm for the fiscal year ended December 31, 2009, contained a fourth explanatory paragraph to reflect its significant doubt about our ability to continue as a going concern as a result of our history of losses and our liquidity position. If we are unable to obtain adequate capital funding in the future, we may not be able to continue as a going concern, which would have an adverse effect on our business and operations, and investors' investment in us may decline.

We have experienced a history of losses, we expect to incur future losses and Access may be unable to obtain necessary additional capital to fund operations in the future.

We have recorded minimal revenue to date and have incurred an accumulated deficit of approximately \$241.8 million through December 31, 2009. Net losses allocable to common stockholders for the years ended 2009 and 2008 were \$19.2 million and \$34.8 million, respectively. Our losses have resulted principally from costs incurred in research and development activities related to our efforts to develop clinical drug candidates and from the associated administrative costs. We expect to incur additional operating losses over the next several years. We also expect cumulative losses to increase if we expand research and development efforts and preclinical and clinical trials. Our net cash burn rate for the year ended December 31, 2009 was approximately \$172,000 per month. We project our net cash burn rate from operations for the next twelve months to be approximately \$450,000 per month. Capital expenditures are forecasted to be minor for the next twelve months.

We require substantial capital for our development programs and operating expenses, to pursue regulatory clearances and to prosecute and defend our intellectual property rights. We believe that our existing capital resources, interest income, product sales, royalties and revenue from possible licensing agreements and collaborative agreements will be sufficient to fund our currently expected operating expenses and capital requirements into the first quarter of 2011. We will need to raise substantial additional capital to support our ongoing operations.

If we raise additional funds by issuing equity securities, further dilution to existing stockholders will result and future investors may be granted rights superior to those of existing stockholders. If adequate funds are not available to us through additional equity offerings, we may be required to delay, reduce the scope of or eliminate one or more of our research and development programs or to obtain funds by entering into arrangements with collaborative partners or others that require us to issue additional equity securities or to relinquish rights to certain technologies or drug candidates that we would not otherwise issue or relinquish in order to continue independent operations.

We do not have significant operating revenue and may never attain profitability.

To date, we have had funded our operations primarily through private sales of common stock, preferred stock and convertible notes. Contract research payments and licensing fees from corporate alliances and mergers have also provided funding for our operations. Our ability to achieve significant revenue or profitability depends upon our ability to successfully market MuGard in North America or to complete the development of drug candidates, to develop and obtain patent protection and regulatory approvals for our drug candidates and to manufacture and commercialize the resulting drugs. We are not expecting any significant revenues in the short-term from our products or product candidates. Furthermore, we may not be able to ever successfully identify, develop, commercialize, patent, manufacture, obtain required regulatory approvals and market any additional products. Moreover, even if we do identify, develop, commercialize, patent, manufacture, and obtain required regulatory approvals to market additional products, we may not generate revenues or royalties from commercial sales of these products for a significant number of years, if at all. Therefore, our proposed operations are subject to all the risks inherent in the establishment of a new business enterprise. In the next few years, our revenues may be limited to minimal product sales and royalties, any amounts that we receive under strategic partnerships and research or drug development collaborations that we may establish and, as a result, we may be unable to achieve or maintain profitability in the future or to achieve significant revenues in order to fund our operations.

Although we expect that the acquisitions of MacroChem and Somanta will result in benefits to us, we may not realize those benefits because of integration and other challenges.

Our ability to realize the anticipated benefits of our prior acquisitions will depend, in part, on our ability to integrate the businesses of MacroChem and Somanta, respectively, with our business. The combination of three independent companies is a complex, costly and time-consuming process. This process may disrupt our business of any or all of the companies, and may not result in the full benefits expected by us.

We may not successfully commercialize our drug candidates.

Our drug candidates are subject to the risks of failure inherent in the development of pharmaceutical products based on new technologies, and our failure to develop safe commercially viable drugs would severely limit our ability to become profitable or to achieve significant revenues. We may be unable to successfully commercialize our drug candidates because:

- some or all of our drug candidates may be found to be unsafe or ineffective or otherwise fail to meet applicable regulatory standards or receive necessary regulatory clearances;
- our drug candidates, if safe and effective, may be too difficult to develop into commercially viable drugs;
- it may be difficult to manufacture or market our drug candidates on a large scale;
- proprietary rights of third parties may preclude us from marketing our drug candidates; and
- third parties may market superior or equivalent drugs.

The success of our research and development activities, upon which we primarily focus, is uncertain.

Our primary focus is on our research and development activities and the commercialization of compounds covered by proprietary biopharmaceutical patents and patent applications. Research and development activities, by their nature, preclude definitive statements as to the time required and costs involved in reaching certain objectives. Actual research and development costs, therefore, could significantly exceed budgeted amounts and estimated time frames may require significant extension. Cost overruns, unanticipated regulatory delays or demands, unexpected adverse side effects or insufficient therapeutic efficacy will prevent or substantially slow our research and development effort and our business could ultimately suffer. We anticipate that we will remain principally engaged in research and development activities for an indeterminate, but substantial, period of time.

We may be unable to successfully develop, market, or commercialize our products or our product candidates without establishing new relationships and maintaining current relationships.

Our strategy for the research, development and commercialization of our potential pharmaceutical products may require us to enter into various arrangements with corporate and academic collaborators, licensors, licensees and others, in addition to our existing relationships with other parties. Specifically, we may seek to joint venture, sublicense or enter other marketing arrangements with parties that have an established marketing capability or we may choose to pursue the commercialization of such products on our own. We may, however, be unable to establish such additional collaborative arrangements, license agreements, or marketing agreements as we may deem necessary to develop, commercialize and market our potential pharmaceutical products on acceptable terms. Furthermore, if we maintain and establish arrangements or relationships with third parties, our business may depend upon the successful performance by these third parties of their responsibilities under those arrangements and relationships.

Our ability to successfully commercialize, and market our product candidates could be limited if a number of these existing relationships are terminated.

Furthermore, our strategy with respect to our polymer platinate program is to enter into a licensing agreement with a pharmaceutical company pursuant to which the further costs of developing a product would be shared with our licensing partners. Although we have had discussions with potential licensing partners with respect to our polymer platinate program, to date we have not entered into any licensing arrangement. We may be unable to execute our licensing strategy for polymer platinate.

We may be unable to successfully manufacture our products and our product candidates in clinical quantities or for commercial purposes without the assistance of contract manufacturers, which may be difficult for us to obtain and maintain.

We have limited experience in the manufacture of pharmaceutical products in clinical quantities or for commercial purposes and we may not be able to manufacture any new pharmaceutical products that we may develop. As a result, we have established, and in the future intend to establish arrangements with contract manufacturers to supply sufficient quantities of products to conduct clinical trials and for the manufacture, packaging, labeling and distribution of finished pharmaceutical products if any of our potential products are approved for commercialization. If Access is unable to contract for a sufficient supply of our potential pharmaceutical products on acceptable terms, our preclinical and human clinical testing schedule may be delayed, resulting in the delay of our clinical programs and submission of product candidates for regulatory approval, which could cause our business to suffer. Our business could suffer if there are delays or difficulties in establishing relationships with manufacturers to produce, package, label and distribute our finished pharmaceutical or other medical products, if any, market introduction and subsequent sales of such products. Moreover, contract manufacturers that we may use must adhere to current Good Manufacturing Practices, as required by the FDA. In this regard, the FDA will not issue a pre-market approval or product and establishment licenses, where applicable, to a manufacturing facility for the products until the manufacturing facility passes a pre-approval plant inspection. If we are unable to obtain or retain third party manufacturing on commercially acceptable terms, we may not be able to commercialize our products as planned. Our potential dependence upon third parties for the manufacture of our products may adversely affect our ability to generate profits or acceptable profit margins and our ability to develop and deliver such products on a timely and competitive basis.

ProLindac™ is manufactured by third parties for our Phase 2 clinical trials. Manufacturing is ongoing for the current clinical trials. Certain manufacturing steps are conducted by the Company to enable significant cost savings to be realized.

We are subject to extensive governmental regulation which increases our cost of doing business and may affect our ability to commercialize any new products that we may develop.

The FDA and comparable agencies in foreign countries impose substantial requirements upon the introduction of pharmaceutical products through lengthy and detailed laboratory, preclinical and clinical testing procedures and other costly and time-consuming procedures to establish safety and efficacy. All of our drugs and drug candidates require receipt and maintenance of governmental approvals for commercialization. Preclinical and clinical trials and manufacturing of our drug candidates will be subject to the rigorous testing and approval processes of the FDA and corresponding foreign regulatory authorities. Satisfaction of these requirements typically takes a significant number of years and can vary substantially based upon the type, complexity and novelty of the product.

Due to the time consuming and uncertain nature of the drug candidate development process and the governmental approval process described above, we cannot assure you when we, independently or with our collaborative partners, might submit a NDA, for FDA or other regulatory review. Further, our ability to commence and/or complete development projects will be subject to our ability to raise enough funds to pay for the development costs of these projects.

Government regulation also affects the manufacturing and marketing of pharmaceutical products. Government regulations may delay marketing of our potential drugs for a considerable or indefinite period of time, impose costly procedural requirements upon our activities and furnish a competitive advantage to larger companies or companies more experienced in regulatory affairs. Delays in obtaining governmental regulatory approval could adversely affect our marketing as well as our ability to generate significant revenues from commercial sales. Our drug candidates may not receive FDA or other regulatory approvals on a timely basis or at all. Moreover, if regulatory approval of a drug candidate is granted, such approval may impose limitations on the indicated use for which such drug may be marketed. Even if we obtain initial regulatory approvals for our drug candidates, our drugs and our manufacturing facilities would be subject to continual review and periodic inspection, and later discovery of previously unknown problems with a drug, manufacturer or facility may result in restrictions on the marketing or manufacture of such drug, including withdrawal of the drug from the market. The FDA and other regulatory authorities stringently apply regulatory standards and failure to comply with regulatory standards can, among other things, result in fines, denial or withdrawal of regulatory approvals, product recalls or seizures, operating restrictions and criminal prosecution.

The uncertainty associated with preclinical and clinical testing may affect our ability to successfully commercialize new products.

Before we can obtain regulatory approvals for the commercial sale of any of our potential drugs, the drug candidates will be subject to extensive preclinical and clinical trials to demonstrate their safety and efficacy in humans. Preclinical or clinical trials of future drug candidates may not demonstrate the safety and efficacy to the extent necessary to obtain regulatory approvals. In this regard, for example, adverse side effects can occur during the clinical testing of a new drug on humans which may delay ultimate FDA approval or even lead it to terminate our efforts to develop the drug for commercial use. Companies in the biotechnology industry have suffered significant setbacks in advanced clinical trials, even after demonstrating promising results in earlier trials. In particular, polymer platinite has taken longer to progress through clinical trials than originally planned. The failure to adequately demonstrate the safety and efficacy of a drug candidate under development could delay or prevent regulatory approval of the drug candidate. A delay or failure to receive regulatory approval for any of our drug candidates could prevent us from successfully commercializing such candidates and we could incur substantial additional expenses in our attempt to further develop such candidates and obtain future regulatory approval.

We may incur substantial product liability expenses due to the use or misuse of our products for which we may be unable to obtain insurance coverage.

Our business exposes us to potential liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. These risks will expand with respect to our drug candidates, if any, that receive regulatory approval for commercial sale and we may face substantial liability for damages in the event of adverse side effects or product defects identified with any of our products that are used in clinical tests or marketed to the public. We generally procure product liability insurance for drug candidates that are undergoing human clinical trials. Product liability insurance for the biotechnology industry is generally expensive, if available at all, and as a result, we may be unable to obtain insurance coverage at acceptable costs or in a sufficient amount in the future, if at all. We may be unable to satisfy any claims for which we may be held liable as a result of the use or misuse of products which we developed, manufactured or sold and any such product liability claim could adversely affect our business, operating results or financial condition.

We may incur significant liabilities if we fail to comply with stringent environmental regulations or if we did not comply with these regulations in the past.

Our research and development processes involve the controlled use of hazardous materials. We are subject to a variety of federal, state and local governmental laws and regulations related to the use, manufacture, storage, handling and disposal of such material and certain waste products. In the event of an accident, we could be held liable for any damages that result and any such liability could exceed our resources.

Intense competition may limit our ability to successfully develop and market commercial products.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Our competitors in the United States and elsewhere are numerous and include, among others, major multinational pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions.

Many of our competitors have and employ greater financial and other resources, including larger research and development, marketing and manufacturing organizations. As a result, our competitors may successfully develop technologies and drugs that are more effective or less costly than any that we are developing or which would render our technology and future products obsolete and noncompetitive.

In addition, some of our competitors have greater experience than we do in conducting preclinical and clinical trials and obtaining FDA and other regulatory approvals. Accordingly, our competitors may succeed in obtaining FDA or other regulatory approvals for drug candidates more rapidly than we can. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before their competitors may achieve a significant competitive advantage. Drugs resulting from our research and development efforts or from our joint efforts with collaborative partners therefore may not be commercially competitive with our competitors' existing products or products under development.

We depend on licenses from third parties and the maintenance of our licenses are necessary for our success.

As a result of our acquisition of MacroChem Corporation and Somanta Pharmaceuticals, Inc., we obtained rights to some product candidates through license agreements with various third party licensors as follows:

- License Agreement, dated as of August 8, 2007, by and between Virium Pharmaceuticals, Inc.(a predecessor in interest to Access) and Southern Research Institute; and
- Exclusive Patent and Know-how Sub-license Agreement between Somanta and Immunodex, Inc. dated August 18, 2005, as amended.

We are dependent upon these licenses for our rights to develop and commercialize our product candidates. These licenses may be terminated or converted to non-exclusive licenses by the licensor if we breach the terms of the license. We cannot guarantee you that the licenses will not be terminated or converted in the future.

Our ability to successfully develop and commercialize our drug candidates will substantially depend upon the availability of reimbursement funds for the costs of the resulting drugs and related treatments.

The successful commercialization of, and the interest of potential collaborative partners to invest in the development of our drug candidates, may depend substantially upon reimbursement of the costs of the resulting drugs and related treatments at acceptable levels from government authorities, private health insurers and other organizations, including health maintenance organizations, or HMOs. Limited reimbursement for the cost of any drugs that we develop may reduce the demand for, or price of such drugs, which would hamper our ability to obtain collaborative partners to commercialize our drugs, or to obtain a sufficient financial return on our own manufacturing and commercialization of any future drugs.

The market may not accept any pharmaceutical products that we develop.

The drugs that we are attempting to develop may compete with a number of well-established drugs manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any drugs developed by us will depend on a number of factors, including the establishment and demonstration of the clinical efficacy and safety of our drug candidates, the potential advantage of our drug candidates over existing therapies and the reimbursement policies of government and third-party payers. Physicians, patients or the medical community in general may not accept or use any drugs that we may develop independently or with our collaborative partners and if they do not, our business could suffer.

Trends toward managed health care and downward price pressures on medical products and services may limit our ability to profitably sell any drugs that we may develop.

Lower prices for pharmaceutical products may result from:

- third-party payers' increasing challenges to the prices charged for medical products and services;

- the trend toward managed health care in the United States and the concurrent growth of HMOs and similar organizations that can control or significantly influence the purchase of healthcare services and products; and
- legislative proposals to reform healthcare or reduce government insurance programs.

The cost containment measures that healthcare providers are instituting, including practice protocols and guidelines and clinical pathways, and the effect of any healthcare reform, could limit our ability to profitably sell any drugs that we may successfully develop. Moreover, any future legislation or regulation, if any, relating to the healthcare industry or third-party coverage and reimbursement, may cause our business to suffer.

We may not be successful in protecting our intellectual property and proprietary rights.

Our success depends, in part, on our ability to obtain U.S. and foreign patent protection for our drug candidates and processes, preserve our trade secrets and operate our business without infringing the proprietary rights of third parties. Legal standards relating to the validity of patents covering pharmaceutical and biotechnological inventions and the scope of claims made under such patents are still developing and there is no consistent policy regarding the breadth of claims allowed in biotechnology patents. The patent position of a biotechnology firm is highly uncertain and involves complex legal and factual questions. We cannot assure you that any existing or future patents issued to, or licensed by, us will not subsequently be challenged, infringed upon, invalidated or circumvented by others. We cannot assure you that any patents will be issued from any of the patent applications owned by, or licensed to, us. Furthermore, any rights that we may have under issued patents may not provide us with significant protection against competitive products or otherwise be commercially viable.

Patents may have been granted to third parties or may be granted covering products or processes that are necessary or useful to the development of our drug candidates. If our drug candidates or processes are found to infringe upon the patents or otherwise impermissibly utilize the intellectual property of others, our development, manufacture and sale of such drug candidates could be severely restricted or prohibited. In such event, we may be required to obtain licenses from third parties to utilize the patents or proprietary rights of others. We cannot assure you that we will be able to obtain such licenses on acceptable terms, if at all. If we become involved in litigation regarding our intellectual property rights or the intellectual property rights of others, the potential cost of such litigation, regardless of the strength of our legal position, and the potential damages that we could be required to pay could be substantial.

Our business could suffer if we lose the services of, or fail to attract, key personnel.

We are highly dependent upon the efforts of our senior management and scientific team, including our President and Chief Executive Officer, Jeffrey B. Davis. The loss of the services of one or more of these individuals could delay or prevent the achievement of our research, development, marketing, or product commercialization objectives. While we have employment agreements with Jeffrey B. Davis, David P. Nowotnik, PhD our Senior Vice President Research and Development and Frank A. Jacobucci, our Vice President Sales and Marketing, their employment may be terminated by them or us at any time. We do not have employment contracts with our other key personnel. We do not maintain any "key-man" insurance policies on any of our key employees and we do not intend to obtain such insurance. In addition, due to the specialized scientific nature of our business, we are highly dependent upon our ability to attract and retain qualified scientific and technical personnel. In view of the stage of our development and our research and development programs, we have restricted our hiring to research scientists and a small administrative staff and we have made only limited investments in manufacturing, production, sales or regulatory compliance resources. There is intense competition among major pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions for qualified personnel in the areas of our activities, however, and we may be unsuccessful in attracting and retaining these personnel.

We may be required to pay liquidated damages to certain investors if we do not maintain an effective registration statement relating to common stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock, upon exercise of certain warrants or the issuance of certain dividends.

Pursuant to issuing Series A Cumulative Convertible Preferred Stock and warrants, we entered into an Investor Rights Agreement with the purchasers of Series A Cumulative Convertible Preferred Stock. The Investor Rights Agreement requires, among other things, that we maintain an effective registration statement for common stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock or upon exercise of certain warrants. We have failed to maintain such an effective registration statement and, as a result, we may be required to pay liquidated damages to certain holders of such Series A Cumulative Convertible Preferred Stock and warrants for the period of time in which an effective registration statement was not in place.

Provisions of our charter documents could discourage an acquisition of our company that would benefit our stockholders and may have the effect of entrenching, and making it difficult to remove, management.

Provisions of our Certificate of Incorporation, By-laws and Stockholders Rights Plan may make it more difficult for a third party to acquire control of us, even if a change in control would benefit our stockholders. In particular, shares of our preferred stock may be issued in the future without further stockholder approval and upon such terms and conditions, and having such rights, privileges and preferences, as our Board of Directors may determine, including, for example, rights to convert into our common stock. The rights of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any of our preferred stock that may be issued in the future. The issuance of our preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire control of us. This could limit the price that certain investors might be willing to pay in the future for shares of our common stock and discourage these investors from acquiring a majority of our common stock. Further, the existence of these corporate governance provisions could have the effect of entrenching management and making it more difficult to change our management.

Substantial sales of our common stock could lower our stock price.

The market price for our common stock could drop as a result of sales of a large number of our presently outstanding shares or shares we may issue or be obligated to issue in the future. Substantially all of the shares of our common stock that were outstanding as of April 9, 2010, are unrestricted and freely tradable or tradable pursuant to a resale registration statement or under Rule 144 of the Securities Act or are covered by a registration rights agreement.

Failure to achieve and maintain effective internal controls could have a material adverse effect on our business.

Effective internal controls are necessary for us to provide reliable financial reports. If we cannot provide reliable financial reports, our operating results could be harmed. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

While we continue to evaluate and improve our internal controls, we cannot be certain that these measures will ensure that adequate controls over our financial processes and reporting in the future. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations.

Failure to achieve and maintain an effective internal control environment could cause investors to lose confidence in our reported financial information, which could have a material adverse effect on our stock price.

Risks relating to this Offering

We will have immediate and broad discretion over the use of the net proceeds from this offering.

There is no minimum offering amount required as a condition to closing this offering and therefore net proceeds from this offering will be immediately available to us to use at our discretion. We intend to use the net proceeds to further develop our products and product candidates and for working capital and general corporate purposes. Our judgment may not result in positive returns on your investment and you will not have an opportunity to evaluate the economic, financial, or other information upon which we base our decisions.

Future sales by our stockholders may adversely affect our stock price and our ability to raise funds in new stock offerings.

Sales of our common stock in the public market following this offering could lower the market price of our common stock. Sales may also make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that our management deems acceptable or at all. Of the 15,382,755 shares of common stock outstanding as of April 9, 2010, 15,382,755 shares are, or will be, freely tradable without restriction, unless held by our "affiliates." Some of these shares may be resold under Rule 144. The sale of the 9,951,198 shares issuable upon conversion of our outstanding preferred stock and 10,966,565 shares issuable upon exercise of outstanding warrants could also lower the market price of our common stock.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of 2,082,870 units offered in this offering at a public offering price of \$3.00 per unit, and after deducting placement agent commissions and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of \$2.53 per share, or 84.3%, at the public offering price, assuming no exercise of the warrants. In addition, in the past, we issued options and warrants to acquire shares of common stock. To the extent these options are ultimately exercised, you will sustain future dilution. We may also acquire or license other technologies or finance strategic alliances by issuing equity, which may result in additional dilution to our stockholders.

There is no public market for the warrants to purchase common stock in this offering.

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing the warrants on any securities exchange. Without an active market, the liquidity of the warrants will be limited.

If the registration statement covering the shares issuable upon exercise of the warrants contained in the units is no longer effective, the unit warrants will be issued with restrictive legends unless such shares are eligible for sale under Rule 144.

The offering may not be fully subscribed and, even if the offering is fully subscribed, we will need additional capital in the future. If additional capital is not available, we may not be able to continue to operate our business pursuant to our business plan or we may have to discontinue our operations entirely.

The placement agent in this offering will offer the units on a "best-efforts" basis, meaning that we may raise substantially less than the total maximum offering amounts. No refund will be made available to investors if less than all of the units are sold. Based on our proposed use of proceeds, we will likely need significant additional financing, which we may seek to raise through, among other things, public and private equity offerings and debt financing. Any equity financing will be dilutive to existing stockholders, and any debt financings will likely involve covenants restricting our business activities. Additional financing may not be available on acceptable terms, or at all.

Risks related to our common stock

We have an unsecured convertible note outstanding in the principle amount of \$5,500,000 which is due on September 13, 2011 and which we may be unable to repay at maturity.

We have a convertible note outstanding to a high net worth individual in the principle amount of \$5.5 million which is due and payable by us on September 13, 2011. This convertible note accrues interest at the rate of 7.7% paid annually. We may not have the funds to repay the holder of the convertible note at maturity or to continue to pay the interest on the convertible note in the ordinary course which would result in our defaulting under the note. If this occurs, the holder of the note would have rights senior to those of our common stockholders.

We have issued and outstanding shares of Series A Cumulative Convertible Preferred Stock with rights and preferences superior to those of our common stock.

The issued and outstanding shares of Series A Cumulative Convertible Preferred Stock grants the holders of such preferred stock anti-dilution, dividend and liquidations rights that are superior to those held by the holders of our common stock.

If we issue shares of our common stock or common stock equivalents at a price below \$3.00 per share, the conversion price of our Series A Cumulative Convertible Preferred Stock will automatically be lowered to the common stock issue price.

Our Series A Cumulative Convertible Preferred Stock includes certain anti-dilution provisions. As a result of the anti-dilution provisions, the conversion price of the Series A Cumulative Convertible Preferred Stock is subject to a price adjustment upon certain issuances of additional shares of common stock for a price below \$3.00 per share.

If we issue shares of our common stock or common stock equivalents at a price below \$3.00 per share, the exercise price of certain of our outstanding warrants will be automatically lowered to the common stock issue price.

Certain of our warrants contain a price protection mechanisms in which the exercise price of these the warrants will automatically be lowered in the event we issue shares of our common stock for a price less than \$3.00 per share.

An investment in our common stock may be less attractive because it is not traded on a recognized public market.

Our common stock has traded on the OTC Bulletin Board, or OTCBB since June 5, 2006. The OTCBB and Pink Sheets are viewed by most investors as a less desirable, and less liquid, marketplace. As a result, an investor may find it more difficult to purchase, dispose of or obtain accurate quotations as to the value of our common stock.

Our common stock is subject to Rules 15g-1 through 15g-9 under the Exchange Act, which imposes certain sales practice requirements on broker-dealers who sell our common stock to persons other than established customers and "accredited investors" (as defined in Rule 501(c) of the Securities Act). For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to the sale. This rule adversely affects the ability of broker-dealers to sell our common stock and purchasers of our common stock to sell their shares of our common stock.

Additionally, our common stock is subject to SEC regulations applicable to "penny stock." Penny stock includes any non-NASDAQ equity security that has a market price of less than \$5.00 per share, subject to certain exceptions. The regulations require that prior to any non-exempt buy/sell transaction in a penny stock, a disclosure schedule proscribed by the SEC relating to the penny stock market must be delivered by a broker-dealer to the purchaser of such penny stock. This disclosure must include the amount of commissions payable to both the broker-dealer and the registered representative and current price quotations for our common stock. The regulations also require that monthly statements be sent to holders of penny stock that disclose recent price information for the penny stock and information of the limited market for penny stocks. These requirements adversely affect the market liquidity of our common stock.

Ownership of our shares is concentrated in the hands of a few investors which could limit the ability of our other stockholders to influence the direction of the company.

As calculated by SEC rules of beneficial ownership, SCO Capital Partners LLC and affiliates, Larry N. Feinberg (Oracle Partners LP, Oracle Institutional Partners LP and Oracle Investment Management Inc.), and Lake End Capital LLC each beneficially owned approximately 52.9%, 10.3% and 7.1%, respectively, of our common stock on an as converted basis as of April 9, 2010. Accordingly, they collectively may have the ability to significantly influence or determine the election of all of our directors or the outcome of most corporate actions requiring stockholder approval. They may exercise this ability in a manner that advances their best interests and not necessarily those of our other stockholders.

FORWARD-LOOKING STATEMENTS

This Prospectus contains “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 that involve risks and uncertainties. These statements include, without limitation, statements relating to uncertainties associated with research and development activities, clinical trials, our ability to raise capital, the timing of and our ability to achieve regulatory approvals, dependence on others to market our licensed products, collaborations, future cash flow, the timing and receipt of licensing and milestone revenues, the future success of our marketed products and products in development, our sales projections, and the sales projections of our licensing partners, our ability to achieve licensing milestones, the size of the prospective markets in which we may offer products, our ability to continue as a going concern, anticipated product approvals and timing thereof, product opportunities, clinical trials and U.S. Food and Drug Administration (“FDA”) applications, as well as our drug development strategy, our clinical development organization expectations regarding our rate of technological developments and competition, our plan not to establish an internal marketing organization, our expectations regarding minimizing development risk and developing and introducing technology, the terms of future licensing arrangements, our ability to secure additional financing for our operations, our ability to establish new relationships and maintain current relationships, our ability to attract and retain key personnel, our belief that we will not pay any cash dividends in the foreseeable future, our belief that a failure to obtain necessary additional capital in the future will result in our operations being jeopardized, our belief that we will expend substantial funds to conduct research and development programs, preclinical studies and clinical trials of potential products, our belief that we will continue to invest available funds in certificates of deposit, money market funds, government securities and investment grade interest-bearing securities and that we will not invest in derivative financial instruments, our belief that the market for a mucositis product is in excess of \$1 billion, our belief that we have a rich pipeline of products and product candidates, our belief that we will continue to evaluate the most cost-effective methods to advance our programs, and our expected cash burn rate. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expects,” “plans,” “could,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of such terms or other comparable terminology. We intend the forward-looking statements to be covered by the safe harbor for forward-looking statements in these sections. The forward-looking information is based on various factors and was derived using numerous assumptions.

Forward-looking statements necessarily involve risks and uncertainties, and our actual results could differ materially from those anticipated in the forward-looking statements due to a number of factors, including those set forth above under “Risk Factors” and elsewhere in this Prospectus. The factors set forth above under “Risk Factors” and other cautionary statements made in this Prospectus should be read and understood as being applicable to all related forward-looking statements wherever they appear in this Prospectus. The forward-looking statements contained in this Prospectus represent our judgment as of the date of this Prospectus. We caution readers not to place undue reliance on such statements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

SELLING STOCKHOLDERS

The following table presents information regarding the selling stockholders. The selling shareholders are the entities who have assisted in or provided financing to us. A description of each selling shareholder's relationship to us and how each selling shareholder acquired the shares to be sold in this offering is detailed in the information immediately following this table. The shares listed in the table do not include the shares of common stock that may be paid as a dividend on outstanding shares of Series A Preferred Stock.

Selling Stockholder	Shares Beneficially Owned Before Offering (1)	Percentage of Outstanding Shares Beneficially Owned Before Offering	Shares to be Sold in the Offering (26)	Percentage of Outstanding Shares Beneficially Owned After Offering
Brio Capital LP (2)	150,000	*	25,000	*
Bristol Investment Fund, Ltd (3)	100,000	*	33,333	*
Carpe Diem Partners LLC (4)	49,999	*	16,666	*
Chestnut Ridge Partners, LP (5)	150,000	*	50,000	*
Cranshire Capital, LP (6)	210,001	1.4%	41,667	1.1%
Del Ray Management, LP (7)	75,000	*	25,000	*
EDJ Limited (8)	61,861	*	20,620	*
GCA Strategic Investment Fund Limited (9)	250,000	1.6%	83,334	1.1%
Kingsbridge Capital Ltd (10)	124,999	*	41,666	*
John C. Lipman (11)	19,999	*	6,666	*
Maletis Partners LP (12)	24,999	*	8,333	*
Midsummer Investment, Ltd (13)	760,000	4.8%	100,000	4.2%
Opus Point Capital Preservation Fund, LP (14)	60,000	*	20,000	*
Opus Point Healthcare Innovations Fund, LP (15)	37,500	*	12,500	*
Opus Point Partners (Low Net) Fund, LP (16)	15,000	*	5,000	*
Opus Point Partners Value Fund, LP (17)	30,000	*	10,000	*
Porter Partners, LP (18)	247,444	1.6%	82,481	1.1%
Poseidon Capital, LLC (19)	19,999	*	6,666	*
Ramius Enterprise Master Fund Ltd (20)	225,000	1.5%	75,000	*
Ramius Navigation Master Fund Ltd (21)	525,000	3.4%	175,000	2.3%
Rockmore Investment Master Fund Ltd (22)	473,333	3.0%	100,000	2.4%
Warburg Opportunity Trading Fund LP (23)	37,500	*	12,500	*
Warrant Strategies Fund LLC (24)	145,000	*	48,333	*
Zanett Opportuntiy Fund, Ltd (25)	124,999	*	41,666	*
Total:	3,917,633	22.8%	1,041,431	17.8%

* - less than 1%

- (1) Applicable percentage of ownership is based on 15,382,755 shares of common stock outstanding as of April 9, 2010, together with securities exercisable or convertible into shares of common stock within 60 days of April 9, 2010, for each stockholder. Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the Commission under the Securities and Exchange Act of 1934, as amended. Shares of common stock issuable pursuant to options, warrants and convertible securities are treated as outstanding for computing the percentage of the person holding such securities but are not treated as outstanding for computing the percentage of any other person. Unless otherwise noted, each person or group identified possesses sole voting and investment power with respect to shares, subject to community property laws where applicable. Shares not outstanding but deemed beneficially owned by virtue of the right of a person or group to acquire them within 60 days are treated as outstanding only for purposes of determining the number of and percent owned by such person or group.
- (2) Brio Capital LP is known to beneficially own an aggregate of 50,000 shares of our Common Stock, warrants to purchase an aggregate of 50,000 shares of our Common Stock and Series A Preferred Stock which may be converted into an aggregate of 50,000 shares of our Common Stock.

- (3) Bristol Investment Fund, Ltd is known to beneficially own an aggregate of 66,667 shares of our Common Stock and warrants to purchase an aggregate of 33,333 shares of our Common Stock.
- (4) Carpe Diem Partners LLC is known to beneficially own an aggregate of 33,333 shares of our Common Stock and warrants to purchase an aggregate of 16,666 shares of our Common Stock.
- (5) Chestnut Ridge Partners, LP is known to beneficially own an aggregate of 100,000 shares of our Common Stock and warrants to purchase an aggregate of 50,000 shares of our Common Stock
- (6) Cranshire Capital, LP is known to beneficially own 83,334 shares of our Common Stock, warrants to purchase an aggregate of 125,000 shares of our Common Stock and Series A Preferred Stock which may be converted into an aggregate of 1,667 shares of our Common Stock. Michael P. Koplin, the president of Downsvie Capital, Inc., the general partner of Cranshire Capital, L.P., has sole voting control and investment discretion over securities held by Cranshire Capital, L.P. Each of Michael P. Koplin and Downsvie Capital, Inc. disclaims beneficial ownership of shares held by Cranshire Capital, L.P.
- (7) De1 Ray Management, LP is known to beneficially own an aggregate of 50,000 shares of our Common Stock and warrants to purchase an aggregate of 25,000 shares of our Common Stock.
- (8) EDJ Limited is known to beneficially own an aggregate of 41,241 shares of our Common Stock and warrants to purchase an aggregate of 20,620 shares of our Common Stock.
- (9) GCA Strategic Investment Fund Limited is known to beneficially own an aggregate of 166,666 shares of our Common Stock and warrants to purchase an aggregate of 83,334 shares of our Common Stock.
- (10) Kingsbridge Capital Ltd is known to beneficially own an aggregate of 83,333 shares of our Common Stock and warrants to purchase an aggregate of 41,666 shares of our Common Stock.
- (11) John C. Lipman is known to beneficially own an aggregate of 13,333 shares of our Common Stock and warrants to purchase an aggregate of 6,666 shares of our Common Stock.
- (12) Maletis Partners LP is known to beneficially own an aggregate of 16,666 shares of our Common Stock and warrants to purchase an aggregate of 8,333 shares of our Common Stock.
- (13) Midsummer Investment, Ltd. is known to beneficially own 200,000 shares of our Common Stock, warrants to purchase an aggregate of 350,000 shares of our Common Stock and Series A Preferred Stock which may be converted into an aggregate of 210,000 shares of Access' Common Stock.
- (14) Opus Point Capital Preservation Fund, LP is known to beneficially own an aggregate of 40,000 shares of our Common Stock and warrants to purchase an aggregate of 20,000 shares of our Common Stock.
- (15) Opus Point Healthcare Innovations Fund, LP is known to beneficially own an aggregate of 25,000 shares of our Common Stock and warrants to purchase an aggregate of 12,500 shares of our Common Stock.
- (16) Opus Point Partners (Low Net) Fund, LP is known to beneficially own an aggregate of 10,000 shares of our Common Stock and warrants to purchase an aggregate of 5,000 shares of our Common Stock.
- (17) Opus Point Partners Value Fund, LP is known to beneficially own an aggregate of 20,000 shares of our Common Stock and warrants to purchase an aggregate of 10,000 shares of our Common Stock.
- (18) Porter Partners, LP is known to beneficially own an aggregate of 164,963 shares of our Common Stock and warrants to purchase an aggregate of 82,481 shares of our Common Stock.
- (19) Poseidon Capital, LLC is known to beneficially own an aggregate of 13,333 shares of our Common Stock and warrants to purchase an aggregate of 6,666 shares of our Common Stock.
- (20) Ramius Enterprise Master Fund Ltd is known to beneficially own an aggregate of 150,000 shares of our Common Stock and warrants to purchase an aggregate of 75,000 shares of our Common Stock.
- (21) Ramius Navigation Master Fund Ltd is known to beneficially own an aggregate of 350,000 shares of our Common Stock and warrants to purchase an aggregate of 175,000 shares of our Common Stock.
- (22) Rockmore Investment Master Fund Ltd is known to beneficially own an aggregate of 200,000 shares of our Common Stock, warrants to purchase an aggregate of 183,333 shares of our Common Stock and Series A Preferred Stock which may be converted into an aggregate of 90,000 shares of our Common Stock. Rockmore Capital, LLC ("Rockmore Capital") and Rockmore Partners, LLC ("Rockmore Partners"), each a limited liability company formed under the laws of the State of Delaware, serve as the investment manager and general partner, respectively, to Rockmore (US) LP, a Delaware limited partnership, which invests all of its assets through Rockmore Investment Master Fund Ltd., an exempted company formed under the laws of Bermuda ("Rockmore Master Fund"). By reason of such relationships, Rockmore Capital and Rockmore Partners may be deemed to share dispositive power over shares of our common stock owned by Rockmore Master Fund. Rockmore Capital and Rockmore Partners disclaim beneficial ownership of such shares of our common stock. Rockmore Partners has delegated authority to Rockmore Capital regarding portfolio management decisions with respect to the shares of common stock owned by Rockmore Master Fund and, as of March 31, 2010, Mr. Bruce T. Bernstein and Mr. Brian Daly, as officers of Rockmore Capital, are responsible for the portfolio management decisions of the shares of common stock owned by Rockmore Master Fund. By reason of such authority, Messrs. Bernstein and Daly may be deemed to share dispositive power over the shares of our common stock owned by Rockmore Master Fund. Messrs. Bernstein and Daly disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock as those terms are used for purposes under Regulation 13D-G of the Securities Exchange Act of 1934, as amended. No person or "group" (as that term is used in Section 13(d) of the Securities Act of 1934, as amended, or the SEC's Regulation 13D-G) controls Rockmore Master Fund.

- (23) Warburg Opportunity Trading Fund LP is known to beneficially own an aggregate of 25,000 shares of our Common Stock and warrants to purchase an aggregate of 12,500 shares of our Common Stock.
- (24) Warrant Strategies Fund LLC is known to beneficially own an aggregate of 96,667 shares of our Common Stock and warrants to purchase an aggregate of 48,333 shares of our Common Stock.
- (25) Zanett Opportunity Fund, Ltd is known to beneficially own an aggregate of 83,333 shares of our Common Stock and warrants to purchase an aggregate of 41,666 shares of our Common Stock.
- (26) This Post-Effective Amendment No. 1 to Registration Statement on Form S-1 (333-162687) is being filed to include in the prospectus contained herein the "Selling Stockholders" table and disclosure with respect to the resale registration of 1,041,431 shares of our common stock underlying certain common stock warrants.

As of April 9, 2010 we are not aware of any short positions in our stock held by the Selling Stockholders.

USE OF PROCEEDS

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

PRICE RANGE OF OUR COMMON STOCK

Market Information

Our common stock has traded on the OTC Bulletin Board, or OTCBB, under the trading symbol ACCP since June 5, 2006.

The following table sets forth, for the periods indicated, the high and low closing prices as reported by OTCBB for our common stock for fiscal years 2009 and 2008. The OTCBB quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

	Common Stock	
	High	Low
<u>Fiscal Year 2010 Year-to date</u>		
First quarter	\$ 3.29	\$ 2.44
Second quarter (through April 9, 2010)	2.50	2.31
<u>Fiscal Year Ended December 31, 2009</u>		
First quarter	\$ 1.85	\$ 0.77
Second quarter	2.25	1.25
Third quarter	4.70	1.84
Fourth quarter	3.50	2.80
<u>Fiscal Year Ended December 31, 2008</u>		
First quarter	\$ 3.50	\$ 1.35
Second quarter	3.30	1.40
Third quarter	3.49	2.50
Fourth quarter	2.75	0.80

We have never declared or paid any cash dividends on our common stock and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. The payment of dividends, if any, in the future is within the discretion of our Board of Directors and will depend on our earnings, capital requirements and financial condition and other relevant facts. We currently intend to retain all future earnings, if any, to finance the development and growth of our business.

We are required, however, to pay dividends on our preferred stock at the rate of 6% per year.

Holders

The number of record holders of our common stock at April 9, 2010 was approximately 6,300. On April 9, 2010, the closing price for the common stock as quoted on the OTCBB was \$2.50. There were 15,382,755 shares of common stock outstanding at April 9, 2010.

There were 2,985,3617 shares of Series A Cumulative Convertible Preferred Stock convertible into 9,951,198 shares of Common Stock at April 9, 2010.

Options and Warrants

There are 10,966,565 outstanding warrants and 1,610,617 outstanding options to purchase our common equity as of April 9, 2010.

Convertible Notes

There is \$5.5 million of convertible notes outstanding and convertible into 200,000 shares of common stock as of April 9, 2010.

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2009 about shares of common stock outstanding and available for issuance under our existing equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding warrants and rights	Weighted-average exercise price of outstanding options warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders:			
2005 Equity Incentive Plan	1,435,237	\$ 1.99	1,408,851
1995 Stock Awards Plan	103,000	15.89	-
2001 Restricted Stock Plan	-	-	52,818
Equity compensation plans not approved by security holders:			
2007 Special Stock Option Plan	100,000	2.9	350,000
Total	1,638,237	\$ 2.92	1,811,669

The 2007 Special Stock Option Plan

The 2007 Special Stock Option Plan (Plan) was adopted by the Board in January 2007. The Plan is not intended to be an incentive stock option plan within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (Code). The Plan allows for the issuance of options to acquire up to 450,000 shares of our common stock of which 100,000 have been issued. The purpose of the Plan is to encourage ownership of common stock by employees, consultants, advisors and directors and to provide additional incentive for them to promote the success of our business. The Plan provides for the grant of non-qualified stock options to employees (including officers, directors, advisors and consultants). The Plan will expire in January 2017, unless earlier terminated by the Board. The options in the Plan granted to date expired March 12, 2010.

For a description of our equity incentive plans, see Footnote 11 to our Consolidated Financial Statements for the fiscal year ended December 31, 2009.

DIVIDEND POLICY

We have never declared or paid any cash dividends on its common stock and we do not anticipate paying any cash dividends in the foreseeable future on its common stock. The payment of dividends on common stock, if any, in the future is within the discretion of our Board of Directors and will depend on its earnings, capital requirements and financial condition and other relevant facts. We currently intends to retain all future earnings, if any, to finance the development and growth of its business.

The holders of Series A Cumulative Convertible Preferred Stock are entitled to receive dividends of 6% per annum on their shares Series A Cumulative Convertible Preferred Stock. The dividends are payable by us semi-annually and may be paid by us either in cash, or if certain conditions are met, at our option, in shares of our common stock. To be eligible to pay dividends in shares of common stock, among other things, there must be in place a registration statement pursuant to which the holders of the Series A Cumulative Convertible Preferred Stock are permitted to utilize the prospectus thereunder to resell all of the shares of common stock issuable in relation to the Series A Cumulative Convertible Preferred Stock.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our consolidated financial statements and related notes included in this Prospectus.

OVERVIEW

Access Pharmaceuticals, Inc. (together with our subsidiaries, "We", "Access" or the "Company") is a Delaware corporation. We are an emerging biopharmaceutical company focused on developing a range of pharmaceutical products primarily based upon our nanopolymer chemistry technologies and other drug delivery technologies. We currently have one approved product, two products at Phase 2 of clinical development and several products in pre-clinical development. Low priority clinical and pre-clinical programs will be dependent on our ability to enter into collaborative arrangements. Certain of our development programs are dependent upon our ability to secure approved funding for such projects. Our description of our business, including our list of products and patents, takes into consideration our acquisition of MacroChem Corporation which closed February 25, 2009.

- MuGard™ is our approved product for the management of oral mucositis, a frequent side-effect of cancer therapy for which there is no established treatment. The market for mucositis treatment is estimated to be in excess of \$1 billion world-wide. MuGard, a proprietary nanopolymer formulation, has received marketing allowance in the U.S. from the Food & Drug Administration (FDA). MuGard has been launched in Germany, Italy, UK, Greece and the Nordic countries by our European commercial partner, SpePharm. Our manufacturing of MuGard is underway as we expect to launch MuGard in North America during the second quarter of 2010. We are working with our partners in Korea and China for marketing.
- Our lead development candidate for the treatment of cancer is ProLindac™, a nanopolymer DACH-platinum prodrug. We recently completed a Phase 2 clinical trial on ProLindac in the EU in patients with recurrent ovarian cancer. The clinical study had positive safety and efficacy results. On January 7, 2010, we announced that we are initiating a study of ProLindac combined with Paclitaxel in second line treatment of platinum pretreated advanced ovarian cancer patients. This multi-center study of up to 25 evaluable patients will be conducted in Europe. We are also currently planning a number of combination trials, looking at combining ProLindac with other cancer agents in solid tumor indications including colorectal and ovarian cancer. The DACH-platinum incorporated in ProLindac is the same active moiety as that in oxaliplatin (Eloxatin; Sanofi-Aventis), which has sales in excess of \$2.0 billion.
- Thiarabine, or 4-thio Ara-C, is a next generation nucleoside analog licensed from Southern Research Institute. Previously named SR9025 and OSI-7836, the compound has been in two Phase 1/2 solid tumor human clinical trials and was shown to have anti-tumor activity. We are working with leukemia and lymphoma specialists at MD Anderson Cancer Center in Houston and intend to initiate additional Phase 2 clinical trials in adult AML, ALL and other indications.
- Cobalamin™ is our proprietary preclinical nanopolymer oral drug delivery technology based on the natural vitamin B12 oral uptake mechanism. We are currently developing a product for the oral delivery of insulin, and have conducted sponsored development of a product for oral delivery of human growth hormone. We are in discussion with several companies regarding the sponsored development of Cobalamin oral drug delivery formulations of proprietary and non-proprietary actives.
- Cobalamin-mediated cancer targeted delivery is a preclinical technology which makes use of the fact that cell surface receptors for vitamins such as B12 are often overexpressed by cancer cells. This technology uses nanopolymer constructs to deliver more anti-cancer drug to tumors while protecting normal tissues.

Products and Product Candidates

We use our drug delivery technologies to develop the following products and product candidates:

Access Drug Portfolio

Compound	Originator	Technology	Indication	Clinical Stage (1)
MuGard™	Access	Mucoadhesive liquid	Mucositis	(510k) Marketing clearance received
ProLindac™ (Polymer Platinate, AP5346) (2)	Access / Univ of London	Synthetic polymer	Cancer	Phase 2
Thiarabine (4-thio Ara-C) (3)	Southern Research Institute	Small molecule	Cancer	Phase 1/2
Oral Insulin	Access	Cobalamin	Diabetes	Pre-clinical
Oral Delivery System	Access	Cobalamin	Various	Pre-clinical
Cobalamin™-Targeted Therapeutics	Access	Cobalamin	Anti-tumor	Pre-clinical

(1) For more information, see “Government Regulation” for description of clinical stages.

(2) Licensed from the School of Pharmacy, The University of London.

(3) Licensed from Southern Research Institute of Birmingham, Alabama.

Recent Events

On January 22, 2010, we announced the sale of approximately 2.10 million shares of our common stock and warrants to purchase approximately 1.05 million shares of our common stock for gross proceeds of approximately \$6.3 million. We sold these shares and warrants as a combined unit for \$3.00 per unit (each unit consisting of one share and a warrant to purchase 0.5 shares of common stock). The exercise price of the warrants is \$3.00 per share.

On January 7, 2010, we announced that we completed enrollment and evaluation of the last additional cohort of patients in the ongoing clinical study of ProLindac as a monotherapy in ovarian cancer patients who received at least two prior platinum based treatment regimens. The additional cohort of 8 patients received the ProLindac batch made by an improved scalable process, which will be used on a larger scale for future clinical and commercial supplies. None of the 8 patients experienced any acute significant adverse events, while treatment had the same beneficial pharmacodynamic effect seen in the first 26 patients treated with the former ProLindac production batch; clinically relevant sustained biomarker decrease (responses by Rustin's criteria) and disease stabilization were seen in several patients. The overall results of our Phase 1/2 exploratory single agent ProLindac study have helped define multiple safe dosing regimens, while the level of patient cohort accrued in the study antitumor activity was as expected in this very heavily pretreated patient cohort.

On December 15, 2009, we announced the appointment of Frank Jacobucci to the position of Vice President, Sales and Marketing. Mr. Jacobucci will be primarily responsible for our marketing launch of MuGard.

On October 6, 2009, we announced that we signed an agreement with iMedicor for the North American launch of MuGard. iMedicor's highly targeted Alerts System application would introduce MuGard by the end 2009 to the 216,000 selected physicians in the United States.

On September 11, 2009, we announced the appointment of Accupac, Inc. as our U.S. manufacturer for MuGard.

On August 3, 2009, we announced that we commenced a new clinical study of ProLindac in France. The study examined dose levels and regimens of ProLindac monotherapy in cancer patients, provided additional data to support design of combinations studies, and extend the safety database.

On July 29, 2009, we announced that we are evaluating strategic options for the commercialization of MuGard in North America.

On July 23, 2009, we announced that our European partner, SpePharm, is collecting data from a post approval study of MuGard in head and neck cancer patients undergoing radiation treatment in the UK showing prevention of oral mucositis. In a multi-center study expected to enroll a total of 280 patients, patients are being provided with seven weeks of MuGard therapy, and begin using MuGard one week prior to radiation treatment and then throughout the subsequent six weeks of planned therapy. The first 140 patients being treated in this assessment study have been enrolled and treated, and as of the time of the update, none of these patients experienced any oral mucositis.

On July 7, 2009, we announced new preclinical data demonstrating that thiarabine shows remarkable efficacy in the prevention and treatment of rheumatoid arthritis (RA). In a well-established animal model for RA, an exceptional restoration of joint structure was observed in the studies, which were conducted at Wayne State University School of Medicine and at Southern Research Institute.

On June 17, 2009, we announced that we signed evaluation agreements with two biopharmaceutical companies for our Cobalamin™ Oral Drug Delivery Technology. Under the terms of the agreements, both companies plan to evaluate our oral insulin product in preclinical models as a prerequisite to entering licensing discussions.

On February 25, 2009, we closed our previously announced acquisition of MacroChem Corporation.

Results of Operations

Comparison of Years Ended December 31, 2009 and 2008

On February 25, 2009, we closed our acquisition of MacroChem Corporation through the issuance of an aggregate of approximately 2.5 million shares of our common stock. Prior to our acquisition of MacroChem, SCO, an investment company, held a majority of Access' and MacroChem's voting stock. Specifically, SCO owned 53% of the voting stock of Access and 63% of the voting stock of MacroChem. A non-controlling interest of 37% existed at the merger date of MacroChem. In addition, certain members of SCO's management serve on the board of directors of both Access and MacroChem. Based on these facts, Access and MacroChem were deemed under the common control of SCO. As the entities were deemed under common control, the acquisition was recorded using the pooling-of-interest method and the financial information for all periods presented reflects the financial statements of the combined companies in accordance with Financial Accounting Standards Board standards on business combinations for entities under common control.

Our licensing revenue for the year ended December 31, 2009 was \$315,000 as compared to \$118,000 for the same period of 2008. We recognize licensing revenue over the period of the performance obligation under our licensing agreements. We have received upfront licensing payments from SpePharm Holding, B.V., RHEI, JCOM and ASK.

We recorded royalty revenue of \$37,000 for the year ended December 31, 2009. There were no royalties in the same year in 2008.

We had sponsored research and development revenue of \$173,000 for the year ended December 31, 2008. The research and development agreement was completed in 2008.

Total research and development spending for the year ended December 31, 2009 was \$2,657,000, as compared to \$23,235,000 for the same period in 2008, a decrease of \$20,578,000. The decrease in expenses was primarily due to:

- the Somanta acquisition resulted in a one-time non-cash in-process research and development expense in the first quarter of 2008 (\$8,879,000);
- MacroChem's acquisition of Virium on April 18, 2008 which resulted in a one-time non-cash in-process research and development expense (\$9,657,000);
- research and development expenses incurred by MacroChem for the year ended December 31, 2008, which are no longer ongoing (\$953,000);
- lower costs for product manufacturing due to the start of a new ProLindac clinical trial (\$753,000);
- lower salary and related expenses (\$392,000);
- lower scientific consulting expenses (\$266,000);
- other net decreases in research spending (\$84,000);
- offset by higher expenses due to option grants (\$303,000); and
- offset by higher clinical costs due to the planned start of a new clinical trial in 2010 (\$103,000).

Total general and administrative expenses were \$7,112,000 for the year ended December 31, 2009, a decrease of \$351,000 over 2008 expenses of \$7,463,000. The decrease in spending was due primarily to the following:

- lower general and administrative expenses incurred by MacroChem for the year ended December 31, 2008 that are no longer ongoing (\$2,943,000);
- lower accrual for liquidated damages (\$493,000);
- lower director and officer insurance and lower director fees (\$166,000) due to lower insurance costs and directors taking options instead of fees in 2009;
- lower patent expenses (\$117,000);
- lower legal and accounting expenses (\$86,000); and
- other net decreases in general and administrative expenses (\$110,000);
- offset by higher shareholder consultant expenses (\$2,348,000) to inform investors about Access and to expand our shareholder base;
- higher business professional expenses (\$1,094,000); and
- higher expenses due to the cost of option grants (\$122,000).

Depreciation and amortization was \$259,000 for the year ended December 31, 2009 as compared to \$324,000 for the same period in 2008 reflecting a decrease of \$65,000. The decrease in depreciation and amortization was due to assets becoming fully depreciated.

Total operating expenses for year ended December 31, 2009 were \$10,028,000 as compared to total operating expenses of \$31,022,000 for same period in 2008, a decrease of \$20,994,000 for the reasons listed above.

Increase in fair value of derivative liability was \$7,154,000 for the year ended December 31, 2009. There was no derivative expense for the year ended December 31, 2008. The explanation of the derivative expense can be found in Note 9 in Notes to Consolidated Financial Statements.

Interest and miscellaneous income was \$29,000 for the year ended December 31, 2009 as compared to \$211,000 for the same period of 2008, a decrease of \$182,000. The decrease in interest and miscellaneous income was due to lower average cash balances during 2009 versus 2008.

Interest and other expense was \$539,000 for the year ended December 31, 2009 as compared to \$911,000 in 2008, a decrease of \$372,000. The decrease in interest and other expense was due to MacroChem notes payable that were exchanged and cancelled for shares of our common stock in connection with our acquisition of MacroChem. The notes payable were issued in the second quarter of 2008.

Preferred stock dividends of \$1,886,000 were accrued for the year ended December 31, 2009 and \$3,358,000 for 2008, a decrease of \$1,472,000. The decrease is due to preferred shareholders converting their ownership to common stock in 2009 and beneficial conversion feature in 2008 as discussed below, offset by a placement of preferred stock that closed in February 4, 2008. Dividends are paid semi-annually in either cash or common stock.

On February 4, 2008, we issued 272.5 shares of our Series A Preferred Stock. The shares are convertible into common stock at \$3.00 per share. Based on the price of our common stock on February 4, 2008 a new conversion price was calculated for the Series A Preferred Stock and was considered to be "in the money" at the time of the agreement to exchange the convertible notes for preferred stock. This resulted in a beneficial conversion feature. The preferred stockholder has the right at any time to convert all or any lesser portion of the Series A Preferred Stock into common stock. This resulted in an intrinsic value of the preferred stock. The difference between the implied value of the preferred stock and the beneficial conversion feature was treated as preferred stock dividends of \$857,000.

An additional \$451,000 in preferred stock dividends was recorded in the first quarter of 2008. The change was due to preferred stock dividends and the beneficial conversion feature associated with the warrants issued in association with the sale of preferred stock in November 2007.

Net loss allocable to common stockholders for year ended December 31, 2009 was \$19,226,000, or a \$1.63 basic and diluted loss per common share, compared with a loss of \$34,789,000, or a \$4.16 basic and diluted loss per common share for the same period in 2008, a decreased loss of \$15,563,000.

Liquidity and Capital Resources

We have funded our operations primarily through private sales of common stock, preferred stock, convertible notes and through licensing agreements. Our principal source of liquidity is cash and cash equivalents. Licensing fees provided limited funding for operations during the year ended December 31, 2009. As of April 9, 2010, our cash and cash equivalents were \$4,231,000 and our net cash burn rate for the year ended December 31, 2009, was approximately \$172,000 per month. As of December 31, 2009, our working capital deficit was \$7,949,000. Our working capital deficit at December 31, 2009 represented an increase of \$3,336,000 as compared to our working capital deficit as of December 31, 2008 of \$4,613,000. The increase in the working capital deficit at December 31, 2009 reflects an increase in operating expenses which included manufacturing product scale-up for our new ProLindac trial and MacroChem expenses offset by milestone payments from our licensing agreements. As of December 31, 2009, we had one convertible note outstanding in the principal amount of \$5.5 million which is due September 13, 2011.

As of April 9, 2010, the Company did not have enough capital to achieve our long-term goals. If we raise additional funds by selling equity securities, the relative equity ownership of our existing investors will be diluted and the new investors could obtain terms more favorable than previous investors. A failure to obtain necessary additional capital in the future could jeopardize our operations and our ability to continue as a going concern.

We have generally incurred negative cash flows from operations since inception, and have expended, and expect to continue to expend in the future, substantial funds to complete our planned product development efforts. Since inception, our expenses have significantly exceeded revenues, resulting in an accumulated deficit as of December 31, 2009 of \$241,807,000. We expect that our capital resources will be adequate to fund our current level of operations into the first quarter of 2011. However, our ability to fund operations over this time could change significantly depending upon changes to future operational funding obligations or capital expenditures. As a result, we are required to seek additional financing sources within the next twelve months. We cannot assure you that we will ever be able to generate significant product revenue or achieve or sustain profitability.

Since our inception, we have devoted our resources primarily to fund our research and development programs. We have been unprofitable since inception and to date have received limited revenues from the sale of products. We cannot assure you that we will be able to generate sufficient product revenues to attain profitability on a sustained basis or at all. We expect to incur losses for the next several years as we continue to invest in product research and development, preclinical studies, clinical trials and regulatory compliance.

We plan to expend substantial funds to conduct research and development programs, preclinical studies and clinical trials of potential products, including research and development with respect to our acquired and developed technology. Our future capital requirements and adequacy of available funds will depend on many factors, including:

- the successful development and commercialization of ProLindac™, MuGard™ and our other product candidates;
- the ability to convert, repay or restructure our outstanding convertible note and debentures;
- the ability to establish and maintain collaborative arrangements with corporate partners for the research, development and commercialization of products;
- continued scientific progress in our research and development programs;
- the magnitude, scope and results of preclinical testing and clinical trials;
- the costs involved in filing, prosecuting and enforcing patent claims;
- the costs involved in conducting clinical trials;
- competing technological developments;
- the cost of manufacturing and scale-up;
- the ability to establish and maintain effective commercialization arrangements and activities; and
- successful regulatory filings.

We have devoted substantially all of our efforts and resources to research and development conducted on our own behalf. The following table summarizes research and development spending by project category (in thousands), which spending includes, but is not limited to, payroll and personnel expense, lab supplies, preclinical expense, development cost, clinical trial expense, outside manufacturing expense and consulting expense:

<u>(in thousands)</u> Project	Twelve Months ended December 31,		Inception To
	<u>2009</u>	<u>2008</u>	Date (1)
Polymer Platinate (ProLindac™)	\$ 2,507	\$ 3,402	\$ 28,126
Mucoadhesive Liquid Technology (MLT)	107	-	1,618
Others (2)	43	332	5,437
Total	<u>\$ 2,657</u>	<u>\$ 3,734</u>	<u>\$ 35,181</u>

(1) Cumulative spending from inception of the Company or project through December 31, 2009.

(2) Includes: Vitamin Mediated Targeted Delivery, carbohydrate targeting and other projects.

Due to uncertainties and certain of the risk factors described above, including those relating to our ability to successfully commercialize our drug candidates, our ability to obtain necessary additional capital to fund operations in the future, our ability to successfully manufacture our products and our product candidates in clinical quantities or for commercial purposes, government regulation to which we are subject, the uncertainty associated with preclinical and clinical testing, intense competition that we face, market acceptance of our products and protection of our intellectual property, it is not possible to reliably predict future spending or time to completion by project or product category or the period in which material net cash inflows from significant projects are expected to commence. If we are unable to timely complete a particular project, our research and development efforts could be delayed or reduced, our business could suffer depending on the significance of the project and we might need to raise additional capital to fund operations, as discussed in the risk factors above, including without limitation those relating to the uncertainty of the success of our research and development activities and our ability to obtain necessary additional capital to fund operations in the future. As discussed in such risk factors, delays in our research and development efforts and any inability to raise additional funds could cause us to eliminate one or more of our research and development programs.

We plan to continue our policy of investing any available funds in certificates of deposit, money market funds, government securities and investment-grade interest-bearing securities. We do not invest in derivative financial instruments.

We do not believe inflation or changing prices have had a material impact on our revenue or operating income.

Climate Change

We do not believe there is anything unique to our business which would result in climate change regulations having a disproportional affect on us as compared to U.S. industry overall.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reported period. In applying our accounting principles, we must often make individual estimates and assumptions regarding expected outcomes or uncertainties. As you might expect, the actual results or outcomes are often different than the estimated or assumed amounts. These differences are usually minor and are included in our consolidated financial statements as soon as they are known. Our estimates, judgments and assumptions are continually evaluated based on available information and experience. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates.

Asset Impairment

Our intangible assets at December 31, 2009 consisted primarily of patents acquired in acquisitions and licenses which were recorded at fair value on the acquisition date. We perform an impairment test on at least an annual basis or when indications of impairment exist. At December 31, 2009 and for the year then ended, Management believes no impairment of our intangible assets exists.

Revenues

Our revenues are generated from licensing and research and development agreements. We recognize revenue in accordance with SEC Staff Accounting Bulletin No. 104 (SAB 104), *Revenue Recognition*. License revenue is recognized over the remaining life of the underlying patent. Research and development revenues are recognized as services are performed.

Stock Based Compensation Expense

We account for stock based compensation expense in accordance with FASB ASC 718, *Stock Based Compensation*. We have several stock-based compensation plans under which incentive and non-incentive qualified stock options and restricted shares may be granted to employees, directors and consultants. We measure the cost of the employee/director/consultant services received in exchange for an award of equity instruments based on the grant date fair value of the award.

Stock-based compensation expense recognized for the years ended December 31, 2009 and 2008 was approximately \$811,000 and \$922,000, respectively.

Recent Accounting Pronouncements

In June 2009, the Financial Accounting Standards Board (FASB) established the FASB Accounting Standards Codification (ASC) as the source of authoritative accounting principles recognized by the FASB to be applied in preparation of financial statements in conformity with U.S. GAAP. As the issuance of ASC does not change U.S. GAAP and our adoption did not have any impact on our 2009 Financial Statements.

In June 2009, the FASB issued accounting guidance that eliminates the exemption from consolidation for qualifying special-purpose entities, effective for financial asset transfers occurring after the beginning of an entity's first fiscal year that begins after November 15, 2009. We currently do not have any of these entities.

In June 2009, the FASB issued accounting guidance that assists in determining whether an enterprise has a controlling financial interest in a variable interest entity. This guidance is effective as of the beginning of the first fiscal year that begins after November 15, 2009. We currently do not have any such arrangements.

In October 2009, the FASB issued new accounting guidance related to revenue arrangements with multiple deliverables that provides principles for allocation of consideration among an arrangement's multiple-elements, allowing more flexibility in identifying and accounting for separate deliverables. The guidance introduces an estimated selling price method for valuing the elements of a bundled arrangement if vendor-specific objective evidence or third-party evidence of selling price is not available, and significantly expands related disclosure requirements. This guidance is effective on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Alternatively, adoption may be on a retrospective basis, and early application is permitted. We are currently evaluating the impact of adopting this guidance on our financial statements.

Off-Balance Sheet Transactions

None

DESCRIPTION OF BUSINESS

Business

Access Pharmaceuticals, Inc. (together with our subsidiaries, “We”, “Access” or the “Company”) is a Delaware corporation. We are an emerging biopharmaceutical company focused on developing a range of pharmaceutical products primarily based upon our nanopolymer chemistry technologies and other drug delivery technologies. We currently have one approved product, two products at Phase 2 of clinical development and several products in pre-clinical development. Low priority clinical and pre-clinical programs will be dependent on our ability to enter into collaborative arrangements. Certain of our development programs are dependent upon our ability to secure approved funding for such projects. Our description of our business, including our list of products and patents, takes into consideration our acquisition of MacroChem Corporation which closed February 25, 2009.

- MuGard™ is our approved product for the management of oral mucositis, a frequent side-effect of cancer therapy for which there is no established treatment. The market for mucositis treatment is estimated to be in excess of \$1 billion world-wide. MuGard, a proprietary nanopolymer formulation, has received marketing allowance in the U.S. from the Food & Drug Administration (FDA). MuGard has been launched in Germany, Italy, UK, Greece and the Nordic countries by our European commercial partner, SpePharm. Our manufacturing of MuGard is underway as we expect to launch MuGard in North America during the second quarter of 2010. We are working with our partners in Korea and China for marketing.
- Our lead development candidate for the treatment of cancer is ProLindac™, a nanopolymer DACH-platinum prodrug. We recently completed a Phase 2 clinical trial on ProLindac in the EU in patients with recurrent ovarian cancer. The clinical study had positive safety and efficacy results. On January 7, 2010, we announced that we are initiating a study of ProLindac combined with Paclitaxel in second line treatment of platinum pretreated advanced ovarian cancer patients. This multi-center study of up to 25 evaluable patients will be conducted in Europe. We are also currently planning a number of combination trials, looking at combining ProLindac with other cancer agents in solid tumor indications including colorectal and ovarian cancer. The DACH-platinum incorporated in ProLindac is the same active moiety as that in oxaliplatin (Eloxatin; Sanofi-Aventis), which has sales in excess of \$2.0 billion.
- Thiarabine, or 4-thio Ara-C, is a next generation nucleoside analog licensed from Southern Research Institute. Previously named SR9025 and OSI-7836, the compound has been in two Phase 1/2 solid tumor human clinical trials and was shown to have anti-tumor activity. We are working with leukemia and lymphoma specialists at MD Anderson Cancer Center in Houston and intend to initiate additional Phase 2 clinical trials in adult AML, ALL and other indications.
- Cobalamin™ is our proprietary preclinical nanopolymer oral drug delivery technology based on the natural vitamin B12 oral uptake mechanism. We are currently developing a product for the oral delivery of insulin, and have conducted sponsored development of a product for oral delivery of human growth hormone. We are in discussion with several companies regarding the sponsored development of Cobalamin oral drug delivery formulations of proprietary and non-proprietary actives.
- Cobalamin-mediated cancer targeted delivery is a preclinical technology which makes use of the fact that cell surface receptors for vitamins such as B12 are often overexpressed by cancer cells. This technology uses nanopolymer constructs to deliver more anti-cancer drug to tumors while protecting normal tissues.

Products

We use our drug delivery technologies to develop the following products and product candidates:

Access Drug Portfolio

<u>Compound</u>	<u>Originator</u>	<u>Technology</u>	<u>Indication</u>	<u>Clinical Stage (1)</u>
MuGard™	Access	Mucoadhesive liquid	Mucositis	(510k) Marketing clearance received
ProLindac™ (Polymer Platinate, AP5346) (2)	Access / Univ of London	Synthetic polymer	Cancer	Phase 2
Thiarabine (4-thio Ara-C) (3)	Southern Research Institute	Small molecule	Cancer	Phase 1/2
Oral Insulin	Access	Cobalamin	Diabetes	Pre-clinical
Oral Delivery System	Access	Cobalamin	Various	Pre-clinical
Cobalamin™-Targeted Therapeutics	Access	Cobalamin	Anti-tumor	Pre-clinical

(1) For more information, see “Government Regulation” for description of clinical stages.

(2) Licensed from the School of Pharmacy, The University of London.

(3) Licensed from Southern Research Institute of Birmingham, Alabama.

Approved Product

MuGard™ - Mucoadhesive Liquid Technology (MLT)

Mucositis is a debilitating condition involving extensive ulceration of the oral cavity that affects annually an estimated 400,000 cancer patients in the United States undergoing chemotherapy and radiation treatment. We believe that any treatment that would accelerate healing and/or diminish the rate of appearance of mucositis would have a significant beneficial impact on the quality of life of these patients and may allow for more aggressive chemotherapy. We believe the potential addressable market for a mucositis product could be over \$1 billion world-wide.

Our MuGard is a viscous polymer solution which provides a coating for the oral cavity. MuGard is dispensed in a ready to use form. A multi-site, randomized clinical study was performed in the United States testing MuGard and MuGard containing an anti-inflammatory drug to determine the effect of these products on the prevention and treatment of mucositis. The data from this trial indicated that the patients using MuGard displayed a lower incidence of mucositis than is typically seen in the studied population with no additional benefit from the drug.

The data were retrospectively compared with two historical patient databases to evaluate the potential advantages MuGard may provide in the prevention, treatment and management of mucositis. The patient evaluation was conducted using the oral mucositis assessment scale (OMAS), which qualifies the disease severity on a scale of 0-5. Key highlights of the comparison with the historical patient databases are as follows:

- the average severity of the disease was reduced by approximately 40%;
- the maximum intensity of the mucositis was approximately 35% lower; and
- the median peak intensity was approximately 50% lower.

These data confirmed the fact that MuGard could represent an important advancement in the management and prevention of mucositis. On December 13, 2006, we announced our receipt of marketing clearance for MuGard from the FDA for the indication of the management of oral wounds including mucositis, aphthous ulcers and traumatic ulcers.

In August 2007 we signed a definitive licensing agreement with SpePharm Holding, B.V. under which SpePharm will market MuGard in Europe. MuGard sales started in Europe in the second quarter of 2009. In January 2008, we signed a definitive licensing agreement with RHEI Pharmaceuticals, Inc. under which RHEI will market MuGard in China and other Southeast Asian countries.

On July 29, 2009, we took control of the North American rights to MuGard from a previous partner which had not received required funding to launch the product in the U.S. In addition, we announced that we are evaluating strategic options for the commercialization of MuGard in North America. Also on July 29, 2009, we announced that Mr. Frank Jacobucci, formerly President & COO of Milestone Biosciences, joined Access as a consultant, and will assist with ongoing reimbursement, manufacturing and commercial launch activities at Access, while discussions with potential licensee and co-promotion partners is ongoing. Subsequent to joining Access as a consultant, Mr. Jacobucci joined Access as a full time employee on December 1, 2009, as Vice President, Sales and Marketing.

On September 11, 2009, we announced the appointment of Accupac, Inc. as our U.S. manufacturer for MuGard. Our manufacturing of MuGard is underway and we expect to launch MuGard in North America during the second quarter of 2010. We are currently executing on numerous strategies including the implementation of a dedicated sales force and marketing strategies, the clinical advancement program for MuGard involving some of the foremost thought leaders in the oral mucositis arena as well as the advancement of the other uniquely differentiated products within our pipeline.

Products in Development

ProLindac™ (Polymer Platinite, AP5346) DACH Platinum

Chemotherapy, surgery and radiation are the major components in the clinical management of cancer patients. Chemotherapy serves as the primary therapy for some solid tumors and their metastases, and is increasingly used as an adjunct to radiation and surgery to improve their effectiveness. For chemotherapeutic agents to be effective in treating cancer patients, however, the agent must reach the target cells in effective quantities with minimal toxicity in normal tissues.

The current optimal strategy for chemotherapy involves exposing patients to the most intensive cytotoxic regimens they can tolerate. Clinicians will often use a combination of chemotherapeutic drugs, a dosing schedule and a method of administration designed to increase the probability that cancerous cells will be destroyed while minimizing the harm to healthy cells. Notwithstanding clinicians' efforts, most current chemotherapeutic drugs have significant shortcomings that limit the efficacy of chemotherapy. For example, certain cancers are inherently unresponsive to chemotherapeutic agents. Alternatively, other cancers may initially respond, but subgroups of cancer cells acquire resistance to the drug during the course of therapy and the resistant cells may survive and cause a relapse. Serious toxicity, including bone marrow suppression, renal toxicity, neuropathy, or irreversible cardiotoxicity, are some of the limitations of current anti-cancer drugs that can prevent their administration in curative doses.

Oxaliplatin, a compound of DACH platinum, is a chemotherapeutic which was initially approved in Europe in 1999 for the treatment of colorectal cancer. It is now also being marketed worldwide and has generated sales in excess of \$2 billion in 2008. Carboplatin and Cisplatin, two other approved platinum chemotherapy drugs, are not indicated for the treatment of metastatic colorectal cancer. Oxaliplatin, in combination with 5-fluorouracil and folinic acid (known as the FOLFOX regime) is indicated for the first-line treatment of metastatic colorectal cancer in Europe and the U.S. The colorectal cancer market is a significant opportunity as there are over 940,000 reported new cases annually worldwide, increasing at a rate of approximately three percent per year, and 500,000 deaths.

Currently, platinum compounds are one of the largest selling categories of chemotherapeutic agents, with annual sales in excess of \$2.7 billion in 2006. As is the case with all chemotherapeutic drugs, the use of such compounds is associated with serious systemic side effects. The drug development goal therefore is to enhance delivery of the active drug to the tumor and minimize the amount of active drug affecting normal organs in the body.

Utilizing a biocompatible water-soluble polymer (HPMA) as a drug carrier, our drug candidate ProLindac, links DACH platinum to a polymer in a manner which permits the selective release of the active drug to the tumor by several mechanisms. The main release mechanism takes advantage of the differential pH in tumor tissue compared to healthy tissue. The polymer also capitalizes on the biological differences in the permeability of blood vessels at tumor sites versus normal tissue. In this way, tumor selective delivery and platinum release is achieved. The ability of ProLindac to inhibit tumor growth has been evaluated in more than ten preclinical models. Compared with the marketed product oxaliplatin, ProLindac was superior, and in several cases markedly superior in most of these models. Preclinical studies of the delivery of platinum to tumors in an animal model have shown that, compared with oxaliplatin at equitoxic doses, ProLindac delivers in excess of 16 times more platinum to the tumor. An analysis of tumor DNA, which is the main target for anti-cancer platinum agents, has shown that ProLindac delivers approximately 14 times more platinum to tumor DNA than oxaliplatin. Results from preclinical efficacy studies conducted in the B16 melanoma and other tumor models have also shown that ProLindac is superior to oxaliplatin in inhibiting the growth of tumors. An extensive preclinical package has been developed supporting the development of ProLindac.

In 2005, we completed a Phase 1 multi-center clinical study conducted in Europe, which enrolled 26 patients. The study was reported in a journal publication, *Cancer Chemotherapy and Pharmacology*, 60(4): 523-533 in 2007. The European trial was designed to identify the maximum tolerated dose, dose limiting toxicities, the pharmacokinetics of the platinum in plasma and the possible anti-tumor activity of ProLindac. The open-label, non-randomized, dose-escalation Phase 1 study was performed at two European centers.

Of the 26 patients, 10 were not evaluable for tumor response, principally due to withdrawal from the study prior to completing the required number of cycles. Of the 16 evaluable patients, 2 demonstrated a partial response, 1 experienced a partial response based on a biomarker and 4 experienced stable disease. One of the patients who attained a partial response had a melanoma with lung metastasis; a CT scan revealed a tumor decrease of greater than 50%. The other patient who responded had ovarian cancer; she had a reduction in lymph node metastasis and remission of a liver metastasis. The patient who experienced a partial response based on a biomarker was an ovarian cancer patient for whom Ca125 levels returned to normal. Also of note, a patient with cisplatin resistant cervical cancer showed a short lasting significant reduction in lung metastasis after 3 doses. However, due to toxicity, the patient could not be retreated to determine whether the partial response could be maintained.

Enrollment in a Phase 2 clinical trial of ProLindac was completed late in 2008 in ovarian cancer patients who relapsed after first line platinum therapy and second line therapies. The primary aim of the study was to determine the response rate of ProLindac monotherapy in this patient population. The response rates for other platinum compounds in this indication are reported, and were used for comparison. Patients were dosed either once every 2 weeks or once every three weeks. As the Phase 1 study involved weekly dosing, the initial phase of the ovarian cancer monotherapy study involved some dose escalation to determine recommended doses using these dosing regimens.

This 26 patient Phase 2 study explored 3 different dose levels and 2 dosing regimens of ProLindac as a monotherapy treatment for advanced ovarian cancer, to provide data on the monotherapy anticancer activity and safety of ProLindac. Of patients eligible for evaluation according to standard RECIST criteria, clinically-meaningful disease stabilization was achieved in 42% of all patients, and 66% of all patients in the higher dose groups. Sustained and significant reductions in Ca125, the established specific serum marker for ovarian cancer, were also observed in several patients.

We reported positive safety and efficacy results from this Phase 2 monotherapy clinical study of ProLindac™ in late-stage, heavily pretreated ovarian cancer patients. No patient in any dose group exhibited any signs of acute neurotoxicity, which is a major adverse side-effect of the approved DACH platinum, Eloxatin, and ProLindac was well tolerated overall. The maximum tolerated dose of ProLindac was established as well as the recommended dose levels for future combination studies.

ProLindac was well tolerated in an absolute sense and relative to commercially-available platinum therapies. We saw significant DACH platinum activity and efficacy in patients at the highest dose levels which we believe is very encouraging given that this study involved monotherapy in a heavily pretreated patient population that typically only respond to aggressive drug combinations. The DACH platinum activity level seen benchmarked favorably with published studies of monotherapy oxaliplatin in similar but less heavily pre-treated patient populations.

On August 3, 2009, we announced that we commenced a new clinical study of ProLindac in France. The study examined dose levels and regimens of ProLindac monotherapy in cancer patients, provided additional data to support design of combinations studies, and extended the safety database. Eight ovarian cancer patients were enrolled in the study at the end of 2009 and none experienced any acute adverse events.

On January 7, 2009, based on the results of the trial with eight patients we announced, the initiation of a study of ProLindac combined with Paclitaxel in second line treatment of platinum pretreated advanced ovarian cancer patients. This study is the first to look at the safety and efficacy of ProLindac in combination with other oncology agents. The efficacy of Diamino Cyclohexane Platinum, the active principle in ProLindac, is evidenced mainly through their synergic association with multiple anticancer agents. The choice of Paclitaxel and ovarian cancer as the potential first NDA strategic choice to be explored is based on the results of the Paclitaxel/Oxaliplatin combination in the same clinical setting. This multi-center study of up to 25 evaluable patients will be conducted in Europe. The efficacy endpoint goal is to achieve a minimum of 63% response rate in the total of 25 evaluable patients the study is planning to accrue on a two step design.

We previously submitted an IND application to the US Food and Drug Administration, and received clearance from the agency to proceed with a Phase 1 clinical study of ProLindac in combination with fluorouracil and leucovorin. The study is designed to evaluate the safety of ProLindac in combination with two standard drugs used to treat colorectal cancer and to establish a safe dose for Phase 2 clinical studies of this combination in colorectal cancer. We are currently evaluating various options for combination trials to be conducted, in the US or other countries.

Thiarabine (4-thio Ara-C)

Our product candidate Thiarabine (SR-9025 or 4'-thio-beta-D-arabinofuranosylcytosine) is a new generation nucleoside analogue which was invented by Southern Research Institute of Birmingham, Alabama. This compound is within a certain class of anti-cancer drugs generally characterized as cytotoxic agents with proven success in solid tumors and certain blood-borne cancers.

Thiarabine exhibited significant activity, including regressions or cures, in six tested leukemia or lymphoma cell lines. The compound produced better activity than ara-C or a fatty acid-modified ara-C (depot) analog in four of six tested models. Thiarabine also performed as well or better than clofarabine and gemcitabine in each of the models.

Unlike ara-C, thiarabine was found to be active in a wide variety of solid tumor xenograft models (14 different cell lines), including colorectal, lung, renal, prostate, breast and pancreatic tumors, mainly via intraperitoneal administration (one model was done iv). Thiarabine produced regressions or tumor-free survivors in about half of the models and exhibited better activity than gemcitabine or clofarabine in many models. Thiarabine activity was also better than that of paclitaxel or cisplatin in certain lung models. An increase in regression or cure rate over either compound alone was observed with combinations of thiarabine and cisplatin in lung tumors, thiarabine and irinotecan or clofarabine in colorectal tumors, and thiarabine plus clofarabine in a leukemia model.

Two phase 1 studies were conducted of thiarabine monotherapy in patients with solid tumors.

In the first phase 1 study, 26 patients with incurable advanced and/or metastatic solid tumors were enrolled. Out of 21 evaluable patients, 9 experienced stable disease (median duration 4.3 months, range 1.8-6.4 months).

Dose-limiting toxicities (DLTs) were observed at 400-600 mg/m². Unlike previous observations with gemcitabine and ara-C (where the DLT is myelosuppression; leucopenia and thrombocytopenia), there were no grade four toxicities and no hematological toxicities other than reversible lymphopenia. Investigators concluded that the (Grade 3) dose-limiting toxicities were fatigue, rash, fever, seizure and lymphopenia.

A second solid tumor phase 1 trial was carried out to explore other schedules. Of the 27 evaluable patients, 7 patients (including bladder cancer and mesothelioma) achieved disease stabilization (median 3.7 months, range 1.9-5.4). The main toxicity was fatigue, which appeared to be schedule independent.

We believe the results seen for thiarabine in leukemia and lymphoma preclinical models and the lymphopenia observed in clinical studies provides a strong rationale for further investigation of thiarabine in leukemia and lymphoma patients. We plan to initiate further thiarabine clinical studies in at least one of these patient populations subject to funding or partnering.

Drug Development Strategy

With the acquisition of Somanta Ltd. in 2008 and MacroChem Corporation in 2009, Access has a rich pipeline of products and product candidates ranging from preclinical development candidates to one approved product. To maximize return on this portfolio, we elected to sell or return the rights to some products so that we can focus our efforts on the development of the remaining products. Products potentially being sold or returned to licensors include Angiolix, Pexiganan, EcoNail and Phenylbutyrate. Products and technologies that we plan to develop in-house and with collaborators are MuGard, ProLindac, Thiarabine and Cobalamin.

A part of our integrated drug development strategy is to form alliances with centers of excellence in order to obtain alternative lead compounds while minimizing the overall cost of research. We do not spend significant resources on fundamental biological research but rather focus on our chemistry expertise and clinical development. For example, certain of our polymer platinate technology has resulted in part from a research collaboration with The School of Pharmacy, University of London.

Our strategy is to focus on our polymer therapeutic program for the treatment of cancer while continuing to develop technologies such as Cobalamin-mediated oral drug delivery and Cobalamin-mediated tumor targeting which could provide us with a revenue stream in the short term through commercialization or outlicensing to fund our longer-term polymer and oncology drug development programs such as ProLindac and Thiarabine. To reduce financial risk and financing requirements, we are directing our resources to the preclinical and early clinical phases of development. We plan to co-develop with or to outlicense to marketing partners our therapeutic product candidates where the size of the necessary clinical studies and cost associated with the later clinical development phases are significant. By forming strategic alliances with pharmaceutical and/or biotech companies, we believe that our technology can be more rapidly developed and successfully introduced into the marketplace.

We will continue to evaluate the most cost-effective methods to advance our programs. We plan to contract certain research and development, manufacturing and manufacturing scaleup, certain preclinical testing and product production to research organizations, contract manufacturers and strategic partners as appropriate to achieve cost savings and accelerate our development programs. We also plan to expand our internal core capabilities and infrastructure in the areas of chemistry, formulation, analytical methods development, clinical development, biology and project management to maximize product opportunities in a timely manner.

Process

We generally begin the product development effort by screening and formulating potential product candidates, selecting an optimal active component, developing a formulation, and developing the processes and analytical methods. Pilot stability, toxicity and efficacy testing are conducted prior to advancing the product candidate into formal preclinical development. Specialized skills are required to produce these product candidates utilizing our technology. We have a limited core internal development capability with significant experience in developing these formulations, but also depend upon the skills and expertise of our contractors.

Once the product candidate has been successfully screened in pilot testing, our scientists, together with external consultants, assist in designing and performing the necessary preclinical efficacy, pharmacokinetic and toxicology studies required for IND submission. External investigators and scaleup manufacturing facilities are selected in conjunction with our consultants. The initial Phase 1 and Phase 2 studies are conducted by institutions and investigators supervised and monitored by our employees and contract research organizations. We do not plan to have an extensive clinical development organization as we plan to have the advance phases of this process conducted by a development partner. We expect to engage a contract research organization to perform Phase 3 clinical studies.

We contract with third party contract research organizations to complete our large clinical trials and for data management of all of our clinical trials. Currently, we are preparing for two Phase 2 ProLindac trials to be completed by our licensees in China and Korea. Our licensees are funding these trials. We are also conducting an additional Phase 2 clinical study in France. Our licensees for MuGard are planning additional clinical studies to strengthen marketing claims

With all of our product development candidates, we cannot assure you that the results of the in vitro or animal studies are or will be indicative of the results that will be obtained if and when these product candidates are tested in humans. We cannot assure you that any of these projects will be successfully completed or that regulatory approval of any product will be obtained.

We expended approximately \$2,657,000 and \$23,235,000 on research and development during the years 2009 and 2008, respectively.

Scientific Background

We possess a broad range of technologies and intellectual property in the areas of drug delivery and oncology. Our core technologies rely on the use of nanopolymers for use in the management of oral conditions such as mucositis, and in drug delivery. In addition, we have small molecule and monoclonal antibody programs which also embody the principals of drug delivery and drug targeting.

In our drug delivery programs for oncology, we believe the ultimate criteria for effective drug delivery is to control and optimize the localized release of the drug at the target site and rapidly clear the non-targeted fraction. Conventional oncology drug delivery systems such as controlled release, sustained release, transdermal systems and others are designed for delivering active product into the systemic circulation over time with the objective of improving patient compliance and extending tumor exposure to drug. These systems do not address the biologically relevant issues such as site targeting, localized release and clearance of drug. The major factors that impact the achievement of this ultimate drug delivery goal are the physical characteristics of the drug and the delivery system, and the biological characteristics of the disease target sites. The physical characteristics of the drug affect solubility in biological systems, its biodistribution throughout the body, and its interactions with the intended pharmacological target sites and undesired areas of toxicity. The biological characteristics of the diseased area impact the ability of the drug to selectively interact with the intended target site to allow the drug to express the desired pharmacological activity.

We believe our drug delivery technologies are differentiated from conventional drug delivery systems in that they seek to apply a disease-specific approach to improve the drug delivery process with formulations to significantly enhance the therapeutic efficacy and reduce toxicity of a broad spectrum of products.

Our Cobalamin oral drug delivery technology seeks to deliver drugs orally to both systemic circulation and to diseased cells. The main use of this technology will be to deliver drugs orally that otherwise could only be administered by injection because of poor natural oral absorption and/or degradation in the gastrointestinal tract. While other oral drug delivery technologies have been reported, the majority rely on permeation enhancement. Permeation enhancement temporarily increase the gaps between the cells which line the gastrointestinal tract to allow more drug to pass through. But this technique also allows many other materials, many potentially toxic, to enter the body more readily. Additionally, permeation enhancers only permit a small increase in oral uptake. The Cobalamin technology relies upon a natural receptor-mediated uptake mechanism which can facilitate uptake of larger quantities of drug. Our nanopolymer technology is used to encapsulate the drug, protecting it in the harsh environment of the gastrointestinal tract, and permits slow drug release once transported into systemic circulation.

Core Drug Delivery Technology Platforms and Technologies

Our current drug delivery technology platforms for use in cancer chemotherapy are:

- Synthetic Polymer Targeted Drug Delivery Technology;
- Cobalamin™-Mediated Oral Delivery Technology; and
- Cobalamin™-Mediated Targeted Delivery Technology.

Each of these platforms is discussed below:

Synthetic Polymer Targeted Drug Delivery Technology

In collaboration with The School of Pharmacy, University of London, we have developed a synthetic polymer technology, which utilizes a hydroxypropylmethacrylamide (HPMA) polymer with platinum, designed to exploit enhanced permeability and retention effect, or EPR, at tumor sites to selectively accumulate drug and control drug release. This technology is employed in our lead clinical program, ProLindac. Many solid tumors possess vasculature that is hyperpermeable, or leaky, to macromolecules. In addition to this enhanced permeability, tumors usually lack effective lymphatic and/or capillary drainage. Consequently, tumors selectively accumulate circulating macromolecules, including, for example, up to 10% of an intravenous dose in mice. The increased tumor uptake of macromolecules and decreased clearance are the main elements of EPR, and is thought to constitute the mechanism of action of styrene-maleic/anhydride-neocarzinostatin, or SMANCS, a polymer therapeutic which is in regular clinical use in Japan for the treatment of hepatoma. These polymers take advantage of endothelial permeability as the drug carrying polymers are trapped in tumors and then taken up by tumor cells. Linkages between the polymer and drug can be designed to be cleaved extracellularly or intracellularly. Utilizing the principles of prodrugs, the drug is essentially inert while attached to the polymer, but is released inside the tumor mass while polymer/drug not delivered to tumors is cleared from the body via the kidneys. For example, ProLindac is attached to a pH-sensitive linker which releases the platinum cytotoxic agent much faster in the low pH environments found typically outside of hypoxic tumor cells and within specific compartments inside of tumor cells. Data generated in animal studies have shown that the polymer/drug complexes are far less toxic than free drug alone and that greater efficacy can be achieved. Thus, these polymer complexes have demonstrated significant improvement in the therapeutic index of anti-cancer drugs, including, for example, platinum.

Cobalamin™-Mediated Oral Delivery Technology

Oral delivery is the preferred method of administration of drugs where either long-term or daily use (or both) is required. However, many therapeutics, including peptide and protein drugs, are poorly absorbed when given orally. With more peptide and protein based biopharmaceuticals entering the market, there is an increasing need to develop an effective oral delivery system for them, as well as for long-standing injected drugs such as insulin.

The difficulty in administering proteins orally is their susceptibility to degradation by digestive enzymes, their inability to cross the intestinal wall and their rapid excretion by the body. Over the years, many different methodologies for making protein drugs available orally have been attempted. Most of the oral protein delivery technologies involve protecting the protein degradation in the intestine. More recently, strategies have been developed that involve coadministering the protein or peptide with permeation enhancers, which assist in passive transit through the gut wall or by attaching the protein or peptide to a molecule that transports the protein across the gut wall. However, the field of oral drug delivery of proteins and peptides has yet to achieve successful commercialization of a product (although positive results have been achieved in early clinical trials for some products under development).

Many pharmaceutically active compounds such as proteins, peptides and cytotoxic agents cannot be administered orally due to their instability in the gastrointestinal tract or their inability to be absorbed and transferred to the bloodstream. A technology that would allow many of these actives to be taken orally would greatly enhance their acceptance and value. Several technologies for the protection of sensitive actives in the gastro-intestinal tract and/or enhancement of gastro-intestinal absorption have been explored and many have failed.

Our proprietary technology for oral drug delivery utilizes the body's natural vitamin B12 (VB12) transport system in the gut. The absorption of VB12 in the intestine occurs by way of a receptor-mediated endocytosis. Initially, VB12 binds to naturally-produced intrinsic factor (IF) in the small intestine, and the VB12-IF complex then binds to the IF receptor on the surface of the intestine. Receptor-mediated endocytosis then allows the transport of VB12 across the gut wall. After binding to another VB12-binding protein, transcobalamin II (TcII), VB12 is transferred to the bloodstream.

Our scientists discovered that Cobalamin (analog of VB12) will still be transported by this process even when drugs, macromolecules, or nanoparticles are coupled to the Cobalamin. Thus Cobalamin serves as a carrier to transfer these materials from the intestinal lumen to the bloodstream. For drugs and macromolecules that are stable in the gastro-intestinal tract, the drug or macromolecule can be coupled directly (or via a linker) to Cobalamin. If the capacity of the Cobalamin transport system is inadequate to provide an effective blood concentration of the active, transport can be amplified by attaching many molecules of the drug to a polymer, to which Cobalamin is also attached. A further option, especially for drugs and macromolecules that are unstable in the intestine, is to formulate the drug in a nanoparticle which is then coated with Cobalamin. Once in the bloodstream, the active is released by diffusion and/or erosion of the nanoparticle. Utilization of nanoparticles also serves to 'amplify' delivery by transporting many molecules at one time due to the inherently large nanoparticle volume compared with the size of the drug.

Our proprietary position in this technology involves the conjugation of Cobalamin or its analogs to a polymer to which is also attached the drug to be delivered, or attached to a nanoparticle in which the drug is incorporated. Since many molecules of the drug are attached to a single polymer strand, or are incorporated in a single nanoparticle, oral uptake is amplified compared to simpler conjugates involving one molecule of the vitamin with one drug molecule. However, in situations when such a simple conjugate might be preferred, our patents also encompass these vitamin-drug conjugates.

Cobalamin™-Mediated Targeted Delivery Technology

Most drugs are effective only when they reach a certain minimum concentration in the region of disease, yet are well distributed throughout the body following delivery to the bloodstream contributing to undesirable side effects. It is therefore advantageous to alter the natural biodistribution of a drug to have it more localized where it is needed. Our Cobalamin-mediated targeted delivery technology utilizes the fact that in many diseases where there is rapid growth and/or cell division, the demand for certain vitamins increases. By coupling the drug to a vitamin analog, the analog serves as a carrier to increase the amount of drug at the disease site relative to its normal distribution.

One application of this technology is in tumor targeting. The use of cytotoxic drugs is one of the most common methods for treating a variety of malignancies including solid and non-solid tumors. The drawbacks of chemotherapeutic treatments, which include tumor resistance, cancer relapse and toxicity from severe damage to healthy tissues, has fuelled a scientific quest for novel treatments that are specifically targeted to malignant cells thus reducing damage to collateral tissues.

The design of targeted therapies involves exploitation of the difference between the structure and function of normal cells compared with malignant cells. Differences include the increased levels of surface receptors on cancer cells, which makes them more sensitive to treatment regimes that target these cell surface receptors and differences in blood supply within and around tumor cells compared with normal cells.

Two basic types of targeting approaches are utilized, passive tumor targeting and active tumor targeting.

- passive tumor targeting involves transporting anti-cancer agents through the bloodstream to tumor cells using a “carrier” molecule. Many different carrier molecules, which can take a variety of forms (micelles, nanoparticles, liposomes and polymers), are being investigated as each provides advantages such as specificity and protection of the anti-cancer drug from degradation due to their structure, size (molecular weights) and particular interactions with tumor cells. Our ProLindac program uses a passive tumor targeting technology.
- active tumor targeting involves attaching an additional fragment to the anticancer drug and the carrier molecule to create a new “targeted” agent that will actively seek a complementary surface receptor to which it binds (preferentially located on the exterior of the tumor cells). The theory is that the targeting of the anti-cancer agent through active binding to the affected cells should allow more of the anti-cancer drug to enter the tumor cell, thus amplifying the response to the treatment and reducing the toxic effect on bystander, normal tissue.

Examples of active targeting fragments include antibodies, growth factors and vitamins. Our scientists have specifically focused on using Cobalamin compounds (analogs of vitamin B12), but we have also used and have certain intellectual property protection for the use of folate and biotin which may more effectively target anti-cancer drugs to certain solid tumors.

It has been known for some time that vitamin B12 and folic acid are essential for tumor growth, and as a result, receptors for these vitamins are up-regulated in certain tumors. Vitamin B12 receptor over-expression occurs in breast, lung, leukemic cells, lymphoma cells, bone, thyroid, colon, prostate and brain cancers and some other tumor lines, while folate receptor over-expression occurs in breast, lung, ovarian, endometrial, renal, colon, brain and cancers of myeloid hematopoietic cells and methotrexate-sensitive tumors.

Other Key Developments

On January 22, 2010, we announced the sale of approximately 2.10 million shares of our common stock and warrants to purchase approximately 1.05 million shares of our common stock for gross proceeds of approximately \$6.3 million. We sold these shares and warrants as a combined unit for \$3.00 per unit (each unit consisting of one share and a warrant to purchase 0.5 shares of common stock). The exercise price of the warrants is \$3.00 per share.

On January 7, 2010, we announced that we completed enrollment and evaluation of the last additional cohort of patients in the ongoing clinical study of ProLindac as a monotherapy in ovarian cancer patients who received at least two prior platinum based treatment regimens. The additional cohort of 8 patients received the ProLindac batch made by an improved scalable process, which will be used on a larger scale for future clinical and commercial supplies. None of the 8 patients experienced any acute significant adverse events, while treatment had the same beneficial pharmacodynamic effect seen in the first 26 patients treated with the former ProLindac production batch; clinically relevant sustained biomarker decrease (responses by Rustin's criteria) and disease stabilization were seen in several patients. The overall results of our Phase 1/2 exploratory single agent ProLindac study have helped define multiple safe dosing regimens, while the level of patient cohort accrued in the study antitumor activity was as expected in this very heavily pretreated patient cohort.

On December 15, 2009, we announced the appointment of Frank Jacobucci to the position of Vice President, Sales and Marketing. Mr. Jacobucci will be primarily responsible for our marketing launch of MuGard.

On October 6, 2009, we announced that we signed an agreement with iMedicor for the North American launch of MuGard. iMedicor's highly targeted Alerts System application would introduce MuGard by the end 2009 to the 216,000 selected physicians in the United States.

On September 11, 2009, we announced the appointment of Accupac, Inc. as our U.S. manufacturer for MuGard.

On August 3, 2009, we announced that we commenced a new clinical study of ProLindac in France. The study examined dose levels and regimens of ProLindac monotherapy in cancer patients, provided additional data to support design of combinations studies, and extend the safety database.

On July 29, 2009, we announced that we are evaluating strategic options for the commercialization of MuGard in North America.

On July 23, 2009, we announced that our European partner, SpePharm, is collecting data from a post approval study of MuGard in head and neck cancer patients undergoing radiation treatment in the UK showing prevention of oral mucositis. In a multi-center study expected to enroll a total of 280 patients, patients are being provided with seven weeks of MuGard therapy, and begin using MuGard one week prior to radiation treatment and then throughout the subsequent six weeks of planned therapy. The first 140 patients being treated in this assessment study have been enrolled and treated, and as of the time of the update, none of these patients experienced any oral mucositis.

On July 7, 2009, we announced new preclinical data demonstrating that thiarabine shows remarkable efficacy in the prevention and treatment of rheumatoid arthritis (RA). In a well-established animal model for RA, an exceptional restoration of joint structure was observed in the studies, which were conducted at Wayne State University School of Medicine and at Southern Research Institute.

On June 17, 2009, we announced that we signed evaluation agreements with two biopharmaceutical companies for our Cobalamin™ Oral Drug Delivery Technology. Under the terms of the agreements, both companies plan to evaluate our oral insulin product in preclinical models as a prerequisite to entering licensing discussions.

On February 25, 2009, we closed our previously announced acquisition of MacroChem Corporation.

We were incorporated in Wyoming in 1974 as Chemex Corporation, and in 1983 we changed our name to Chemex Pharmaceuticals, Inc. We changed our state of incorporation from Wyoming to Delaware on June 30, 1989. In 1996 we merged with Access Pharmaceuticals, Inc., a private Texas corporation, and changed our name to Access Pharmaceuticals, Inc. Our principal executive office is located at 2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207; our telephone number is (214) 905-5100.

Patents

We believe that the value of technology both to us and to our potential corporate partners is established and enhanced by our broad intellectual property positions. Consequently, we have already been issued and seek to obtain additional U.S. and foreign patent protection for products under development and for new discoveries. Patent applications are filed with the U.S. Patent and Trademark Office and, when appropriate, with the Paris Convention's Patent Cooperation Treaty (PCT) Countries (most major countries in Western Europe and the Far East) for our inventions and prospective products.

Two U.S. patents have issued and two European patent applications are under review for our mucoadhesive liquid technology. Our patent applications cover a range of products utilizing our mucoadhesive liquid technology for the management of the various phases of mucositis.

Three U.S. patents and two European patents were issued and one U.S. patent and two European patent applications are pending for polymer platinum compounds. The two patents and patent applications are the result in part of our collaboration with The School of Pharmacy, University of London, from which the technology has been licensed and include a synthetic polymer, hydroxypropylmethacrylamide incorporating platinates, that can be used to exploit enhanced permeability and retention in tumors and control drug release. The patents and patent applications include a pharmaceutical composition for use in tumor treatment comprising a polymer-platinum compound through linkages that are designed to be cleaved under selected conditions to yield a platinum which is selectively released at a tumor site. The patents and patent applications also include methods for improving the pharmaceutical properties of platinum compounds.

Thiarabine is subject to two process patents that expire in 2018, one use patent that expires in 2019, as well as patent applications that provide additional protection to the manufacturing process and use.

We have two patented Cobalamin-mediated targeted therapeutic technologies:

- the use of vitamin B12 to target the transcobalamin II receptor which is upregulated in numerous diseases including cancer, rheumatoid arthritis, certain neurological and autoimmune disorders with two U.S. patents and three U.S. and four European patent applications; and
- oral delivery of a wide variety of molecules which cannot otherwise be orally administered, utilizing the active transport mechanism which transports vitamin B12 into the systemic circulation with six U.S. patents and two European patents and one U.S. and one European patent application.

We also have intellectual property in connection with the use of another B vitamin, folic acid, for targeting of polymer therapeutics. Enhanced tumor delivery is achieved by targeting folate receptors, which are upregulated in certain tumor types. We have two U.S. and two European patent applications related to folate polymer therapeutics.

Our patents for the following technologies expire in the years and during the date ranges indicated below:

- Mucoadhesive technology in 2021,
- ProLindac™ in 2021,
- Thiarabine in 2018, and
- Cobalamin mediated technology between 2010 and 2019

In addition to issued patents, we have a number of pending patent applications. If issued, the patents underlying these applications could extend the patent life of our technologies beyond the dates listed above.

We have a strategy of maintaining an ongoing line of patent continuation applications for each major category of patentable carrier and delivery technology. By this approach, we are extending the intellectual property protection of our basic targeting technology and initial agents to cover additional specific carriers and agents, some of which are anticipated to carry the priority dates of the original applications.

Government Regulation

We are subject to extensive regulation by the federal government, principally by the FDA, and, to a lesser extent, by other federal and state agencies as well as comparable agencies in foreign countries where registration of products will be pursued. Although a number of our formulations incorporate extensively tested drug substances, because the resulting formulations make claims of enhanced efficacy and/or improved side effect profiles, they are expected to be classified as new drugs by the FDA.

The Federal Food, Drug and Cosmetic Act and other federal, state and foreign statutes and regulations govern the testing, manufacturing, safety, labeling, storage, shipping and record keeping of our products. The FDA has the authority to approve or not approve new drug applications and inspect research, clinical and manufacturing records and facilities.

Among the requirements for drug approval and testing is that the prospective manufacturer's facilities and methods conform to the FDA's Code of Good Manufacturing Practices regulations, which establishes the minimum requirements for methods to be used in, and the facilities or controls to be used during, the production process. Such facilities are subject to ongoing FDA inspection to insure compliance.

The steps required before a pharmaceutical product may be produced and marketed in the U.S. include preclinical tests, the filing of an IND with the FDA, which must become effective pursuant to FDA regulations before human clinical trials may commence, numerous phases of clinical testing and the FDA approval of a New Drug Application (NDA) prior to commercial sale.

Preclinical tests are conducted in the laboratory, usually involving animals, to evaluate the safety and efficacy of the potential product. The results of preclinical tests are submitted as part of the IND application and are fully reviewed by the FDA prior to granting the sponsor permission to commence clinical trials in humans. All trials are conducted under International Conference on Harmonization (ICH), good clinical practice guidelines. All investigator sites and sponsor facilities are subject to FDA inspection to insure compliance. Clinical trials typically involve a three-phase process. Phase 1 the initial clinical evaluations, consists of administering the drug and testing for safety and tolerated dosages and in some indications such as cancer and HIV, as preliminary evidence of efficacy in humans. Phase 2 involves a study to evaluate the effectiveness of the drug for a particular indication and to determine optimal dosage and dose interval and to identify possible adverse side effects and risks in a larger patient group. When a product is found safe, an initial efficacy is established in Phase 2, it is then evaluated in Phase 3 clinical trials. Phase 3 trials consist of expanded multi-location testing for efficacy and safety to evaluate the overall benefit to risk index of the investigational drug in relationship to the disease treated. The results of preclinical and human clinical testing are submitted to the FDA in the form of an NDA for approval to commence commercial sales.

The process of forming the requisite testing, data collection, analysis and compilation of an IND and an NDA is labor intensive and costly and may take a protracted time period. In some cases, tests may have to be redone or new tests instituted to comply with FDA requests. Review by the FDA may also take considerable time and there is no guarantee that an NDA will be approved. Therefore, we cannot estimate with any certainty the length of the approval cycle.

We are also governed by other federal, state and local laws of general applicability, such as laws regulating working conditions, employment practices, as well as environmental protection.

Competition

The pharmaceutical and biotechnology industry is characterized by intense competition, rapid product development and technological change. Competition is intense among manufacturers of prescription pharmaceuticals and other product areas where we may develop and market products in the future. Most of our potential competitors are large, well established pharmaceutical, chemical or healthcare companies with considerably greater financial, marketing, sales and technical resources than are available to us. Additionally, many of our potential competitors have research and development capabilities that may allow such competitors to develop new or improved products that may compete with our product lines. Our potential products could be rendered obsolete or made uneconomical by the development of new products to treat the conditions to be addressed by our developments, technological advances affecting the cost of production, or marketing or pricing actions by one or more of our potential competitors. Our business, financial condition and results of operation could be materially adversely affected by any one or more of such developments. We cannot assure you that we will be able to compete successfully against current or future competitors or that competition will not have a material adverse effect on our business, financial condition and results of operations. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or with the assistance of major health care companies in areas where we are developing product candidates. We are aware of certain development projects for products to treat or prevent certain diseases targeted by us, the existence of these potential products or other products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of products developed by us.

In the area of advanced drug delivery, which is the focus of our early stage research and development activities, a number of companies are developing or evaluating enhanced drug delivery systems. We expect that technological developments will occur at a rapid rate and that competition is likely to intensify as various alternative delivery system technologies achieve similar if not identical advantages.

Even if our products are fully developed and receive required regulatory approval, of which there can be no assurance, we believe that our products can only compete successfully if marketed by a company having expertise and a strong presence in the therapeutic area. Consequently, we do not currently plan to establish an internal marketing organization. By forming strategic alliances with major and regional pharmaceutical companies, management believes that our development risks should be minimized and that the technology potentially could be more rapidly developed and successfully introduced into the marketplace.

Amgen Inc., Carrington Laboratories Inc., CuraGen Corporation, Cytogen Corporation, Endo Pharmaceuticals, MGI Pharma Inc., Nuvelo, Inc. and OSI Pharmaceuticals Inc. are developing products to treat mucositis that may compete with our mucoadhesive liquid technology.

The following products may compete with polymer platinite:

- Cisplatin, marketed by Bristol-Myers Squibb, the originator of the drug, and several generic manufacturers;
- Carboplatin, marketed by Bristol-Myers Squibb in the US; and several generic manufacturers, and
- Oxaliplatin, marketed exclusively by Sanofi-Aventis.

The following companies are working on therapies and formulations that may be competitive with our polymer platinite:

- Antigenics and Regulon are developing liposomal platinum formulations;
- Poniard Pharmaceuticals and Cell Therapeutics are developing both i.v. and oral platinum formulations;
- Nanocarrier and Debio are developing micellar nanoparticle platinum formulations; and
- American Pharmaceutical Partners, Cell Therapeutics, Daiichi, SynDevRx, and Enzon are developing alternate drugs in combination with polymers and other drug delivery systems.

Thiarabine's competitors are Eli Lilly and Company, Bayer Healthcare, Cyclacel, Ltd., SciClone Pharmaceuticals and Genzyme.

Companies working on therapies and formulations that may be competitive with our vitamin mediated drug delivery system are Bristol-Myers Squibb, Centocor (acquired by Johnson & Johnson), Endocyte, GlaxoSmithKline, Imclone and Xoma which are developing targeted monoclonal antibody therapy.

BioDelivery Sciences International, Biocon Limited, Bidel, Inc. Biovail Corporation, , Diasome Pharmaceuticals, , Depomed Inc., Emisphere Technologies, Inc., Eurand, Flamel Technologies, Merrion Pharmaceuticals, OraMed and Xenoport are developing products which compete with our oral drug delivery system.

Many of these competitors have greater financial and other resources, including larger research and development, marketing and manufacturing organizations. As a result, our competitors may successfully develop technologies and drugs that are more effective or less costly than any that we are developing or which would render our technology and future products obsolete and noncompetitive.

In addition, some of our competitors have greater experience than we do in conducting preclinical and clinical trials and obtaining FDA and other regulatory approvals. Accordingly, our competitors may succeed in obtaining FDA or other regulatory approvals for drug candidates more rapidly than we do. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before their competitors may achieve a significant competitive advantage. Drugs resulting from our research and development efforts or from our joint efforts with collaborative partners therefore may not be commercially competitive with our competitors' existing products or products under development.

Suppliers

Some materials used by us are specialized. We obtain materials from several suppliers based in different countries around the world. If materials are unavailable from one supplier we generally have alternate suppliers available.

Employees

As of April 9, 2010, we had eleven full time employees, four of whom have advanced scientific degrees. We have never experienced employment-related work stoppages and consider that we maintain good relations with our personnel. In addition, to complement our internal expertise, we have contracts with scientific consultants, contract research organizations and university research laboratories that specialize in various aspects of drug development including clinical development, regulatory affairs, toxicology, process scale-up and preclinical testing.

Web Availability

We make available free of charge through our website, www.accesspharma.com, our annual reports on Form 10-K and other reports that we file with the Securities and Exchange Commission as well as certain of our corporate governance policies, including the charters for the Board of Directors' audit, compensation and nominating and corporate governance committees and our code of ethics, corporate governance guidelines and whistleblower policy. We will also provide to any person without charge, upon request, a copy of any of the foregoing materials. Any such request must be made in writing to us at: Access Pharmaceuticals, Inc., 2600 Stemmons Freeway, Suite 176, Dallas, TX 75207 attn: Investor Relations.

DESCRIPTION OF PROPERTY

We maintain one facility of approximately 9,000 square feet for administrative offices and laboratories in Dallas, Texas. We have a lease agreement for the facility, which terminates in December 2010. Adjacent space may be available for expansion which we believe would accommodate growth for the foreseeable future.

We believe that our existing properties are suitable for the conduct of our business and adequate to meet our present needs.

DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

The following table sets forth the Directors, Executive Officers, and Key Employees of Access along with their respective ages and positions and is as follows:

<u>Name</u>	<u>Age</u>	<u>Title</u>
Steven H. Rouhandeh	53	Chairman of the Board*
Jeffrey B. Davis	47	Chief Executive Officer, Director*
Esteban Cvitkovic, M.D.	60	Vice Chairman – Europe
Mark J. Ahn, Ph.D.	47	Director
Mark J. Alvino	41	Director
Stephen B. Howell, M.D.	65	Director
David P. Nowotnik, Ph.D.	61	Senior Vice President Research & Development
Frank A. Jacobucci	48	Vice President, Sales and Marketing
Phillip S. Wise	51	Vice President, Business Development & Strategy
Stephen B. Thompson	56	Vice President, Chief Financial Officer, Treasurer, Secretary

* Appointed to the board of directors by SCO Capital Partners LLC (“SCO”) pursuant to a Director Designation Agreement between SCO and Access.

None of our directors, officers, affiliates or promoters has, within the past five years, filed any bankruptcy petition, been convicted in or been the subject of any pending criminal proceedings, or is any such person the subject of any order, judgment or decree involving the violation of any state or federal securities laws.

The following is a brief account of the business experience during the past five years of each of our directors and executive officers, including principal occupations and employment during that period and the name and principal business of any corporation or other organization in which such occupation and employment were carried on.

Mr. Steven H. Rouhandeh became a director and Chairman of the Board on March 4, 2008. He is a Chief Investment Officer of SCO Capital Partners, L.P., a New York based life sciences fund. Mr. Rouhandeh also is a founder of SCO Financial Group LLC, a highly successful value-oriented healthcare group with an 12-year track record in this sector (advisory, research, banking and investing). He possesses a diverse background in financial services that includes experience in asset management, corporate finance, investment banking and law. He has been active throughout recent years as an executive in venture capital and as a founder of several companies in the biotech field. His experience also includes positions as Managing Director of a private equity group at Metzler Bank, a private European investment firm and Vice President, Investment Banking at Deutsche Morgan Grenfell. Mr. Rouhandeh was also a corporate attorney at New York City-based Cravath, Swaine & Moore. Mr. Rouhandeh holds a J.D., from Harvard Law School, Harvard University and B.A. Government, Economics, from Southern Illinois University.

Mr. Jeffrey B. Davis became a director in March 2006. Mr. Davis became our Chief Executive Officer on December 26, 2007. Previously, Mr. Davis was Chairman of the Board and Chairman of the Compensation Committee of the Board. Mr. Davis currently serves as President of SCO Financial Group LLC and has been employed by SCO since 1997. Previously, Mr. Davis served in senior management at a publicly traded healthcare technology company. Prior to that, Mr. Davis was an investment banker with various Deutsche Bank banking organizations, both in the U.S. and Europe. Mr. Davis also served in senior marketing and product management positions at AT&T Bell Laboratories, where he was also a member of the technical staff, and at Philips Medical Systems North America. Mr. Davis is currently on the board of Uluru, Inc., a public biotechnology company. Mr. Davis holds a B.S. in biomedical engineering from Boston University and an M.B.A. degree from the Wharton School, University of Pennsylvania.

Dr. Esteban Cvitkovic became our director in February 2007 as Vice Chairman (Europe) and is also a consultant to us as Senior Director, Oncology Clinical Research & Development. Recently, Dr. Cvitkovic co-founded the new contract research organization (CRO), Oncology Therapeutic Development. The oncology-focused CRO, Cvitkovic & Associés Consultants (CAC), founded by Dr. Cvitkovic 11 years ago and which he developed from a small oncology consultancy to a full-service CRO, was sold to AAIPharma to become AAIOncology in 2007. In addition, he maintains a part-time academic practice including teaching at the hospitals Beaujon and St. Louis in Paris. Dr. Cvitkovic is Scientific President of the FNAB, a foundation devoted to the furthering of personalized cancer treatments. Together with a small number of collaborators, he has recently co-founded Oncoethix, a biotech company focused on licensing and co-development of anti-cancer molecules. Dr. Cvitkovic has authored more than 200 peer-reviewed articles and 600 abstracts focused on therapeutic oncology development. His international career includes staff and academic appointments at Memorial Sloan Kettering Cancer Center (New York), Columbia Presbyterian (New York), Instituto Mario Negri (Milan), Institut Gustave Roussy (Villejuif), Hôpital Paul Brousse (Villejuif) and Hôpital St. Louis (Paris).

Mark J. Ahn, Ph. D. became a director in September 2006 and is chairman of the Compensation Committee. Dr. Ahn is also a member of the Audit and Finance Committee and the Nominating & Corporate Governance Committee. Dr. Ahn is Principal at Pukana Partners, Ltd. since 2009. Dr. Ahn was Professor and Chair, Science & Technology Faculties of Commerce & Administration Science at Victoria University of Wellington, New Zealand from 2007 to 2009. Dr. Ahn was President and Chief Executive Officer and a member of the board of directors of Hana Biosciences, Inc. from 2003 to 2007. Prior to joining Hana, from 2001 to 2003, he served as Vice President, Hematology and corporate officer at Genentech, Inc. where he was responsible for commercial and clinical development of the Hematology franchise. From 1991 to 2001, Dr. Ahn was employed by Amgen and Bristol-Myers Squibb Company holding a series of positions of increasing responsibility in strategy, general management, sales & marketing, business development, and finance. He has also served as an officer in the U.S. Army. Dr. Ahn is a Henry Crown Fellow at the Aspen Institute, founder of the Center for Non-Profit Leadership, a director of TransMolecular, Inc., a privately held biotechnology company focused on neuroncology, and a member of the Board of Trustees for the MEDUNSA (Medical University of South Africa) Trust. Dr. Ahn received a B.A. in History and an M.B.A. in Finance from Chaminade University. He was a graduate fellow in Economics at Essex University, and has a Ph.D. in Business Administration from the University of South Australia.

Mr. Mark J. Alvino became a director in March 2006 initially as a designee of SCO Capital Partners LLC and is chairman of the Audit and Finance Committee. Mr. Alvino is also a member of the Nominating and Corporate Governance Committee. Mr. Alvino is currently Managing Director for Griffin Securities and has been in this position since 2007. Mr. Alvino was Managing Director for SCO Financial Group LLC from 2002 to 2007. Mr. Alvino was a member of the board of directors of MacroChem Corporation from 2007 until February 2009. He previously worked at Feinstein Kean Healthcare, an Ogilvy Public Relations Worldwide Company. There he was Senior Vice President, responsible for managing both investor and corporate communications programs for many private and public companies and acted as senior counsel throughout the agency's network of offices. Prior to working at FKH, Mr. Alvino served as Vice President of Investor Relations and managed the New York Office of Allen & Caron, Inc., an investor relations agency. His base of clients included medical devices, biotechnology, and e-healthcare companies. Mr. Alvino also spent several years working with Wall Street brokerages including Ladenburg, Thallman & Co. and Martin Simpson & Co.

Stephen B. Howell, M.D. has served as our director since 1996. Dr. Howell is a member of the Compensation Committee of the Board. Dr. Howell is a Professor of Medicine at the University of California, San Diego, and director of the Cancer Pharmacology Program of the UCSD Cancer Center. Dr. Howell is a recipient of the Milken Foundation prize for his contributions to the field of cancer chemotherapy. He has served on the National Research Council of the American Cancer Society and is on the editorial boards of multiple medical journals. Dr. Howell founded DepoTech, Inc. and served as a member of its board of directors from 1989 to 1999. Dr. Howell served on the board of directors of Matrix Pharmaceuticals from 2000 to 2002. Dr. Howell received his A.B. at the University of Chicago and his M.D. from Harvard Medical School.

David P. Nowotnik, Ph.D. has been Senior Vice President Research and Development since January 2003 and was Vice President Research and Development from 1998. From 1994 until 1998, Dr. Nowotnik had been with Guilford Pharmaceuticals, Inc. in the position of Senior Director, Product Development and was responsible for a team of scientists developing polymeric controlled-release drug delivery systems. From 1988 to 1994 he was with Bristol-Myers Squibb researching and developing technetium radiopharmaceuticals and MRI contrast agents. From 1977 to 1988 he was with Amersham International leading the project which resulted in the discovery and development of Ceretec.

Mr. Frank A. Jacobucci has been our Vice President Sales and Marketing since December 2009. Mr. Jacobucci was President and COO of Milestone Biosciences, LLC from 2007 to 2009. He was Vice President Sales/Marketing of Claims Resolution Center Oncology Services in 2007, Area Sales Manager-Eastern Seaboard of Precision Therapeutics, Inc. from 2006-2007 and Sales Trainer/Field Sales Advisor/Senior Sales Executive of MGI Pharma from 2003 to 2006. Mr. Jacobucci has had manager positions with increasing responsibilities from 1990 to 2003 with various other pharmaceutical and other companies. He holds a B.S. degree from University of Nevada , Las Vegas.

Mr. Phillip S. Wise has been Access' Vice President Business Development since June 2006. Mr. Wise was Vice President of Commercial and Business Development for Enhance Pharmaceuticals, Inc. and Ardent Pharmaceuticals, Inc. from 2000 until 2006. Prior to that time he was with Glaxo Wellcome, from 1990 to 2000 in various capacities.

Mr. Stephen B. Thompson has been our Vice President since 2000 and our Chief Financial Officer since 1996. From 1990 to 1996, he was Controller and Administration Manager of Access Pharmaceuticals, Inc., a private Texas corporation. Previously, from 1989 to 1990, Mr. Thompson was Controller of Robert E. Woolley, Inc., a hotel real estate company where he was responsible for accounting, finances and investor relations. From 1985 to 1989, he was Controller of OKC Limited Partnership, an oil and gas company, where he was responsible for accounting, finances and SEC reporting. Between 1975 and 1985 he held various accounting and finance positions with Santa Fe International Corporation.

Committees of the Board of Directors

Our Board established an Audit and Finance Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. Each of the committees of the Board acts pursuant to a separate written charter adopted by the Board.

The Audit and Finance Committee is currently comprised of Mr. Mark J. Alvino (chairman) and Dr. Mark J. Ahn. The Board has determined that Mr. Alvino, the chairman of the Audit and Finance Committee, and Dr. Ahn are "audit committee financial experts," under applicable SEC rules and regulations. David P. Luci, a former director, was chairman of the Audit and Finance Committee during 2009. The Audit and Finance Committee's responsibilities and duties are among other things to engage the independent auditors, review the audit fees, supervise matters relating to audit functions and review and set internal policies and procedure regarding audits, accounting and other financial controls.

The Compensation Committee is currently comprised of Dr. Mark J. Ahn (chairman) and Dr. Stephen B. Howell. Dr. Ahn and Dr. Howell are non-employee directors under applicable SEC rules, and are "outside" directors under Internal Revenue Code Section 162(m). Dr. Ahn and Dr. Howell are independent under applicable NYSE Amex rules and regulations. Mr. Luci and Dr. Howell were members of the Compensation Committee during 2009.

The Nominating and Corporate Governance Committee is currently comprised of Dr. Mark J. Ahn and Mark J. Alvino. All committee members are independent under applicable NYSE Amex rules and regulations. The Nominating and Corporate Governance Committee is responsible for, among other things, considering potential Board members, making recommendations to the full Board as to nominees for election to the Board, assessing the effectiveness of the Board and implementing our corporate governance guidelines.

Code of Business Conduct and Ethics

In October 2004, Access adopted a written Code of Business Conduct and Ethics for Employees, Executive Officers and Directors, applicable to all employees, management, and directors, designed to deter wrongdoing and promote honest and ethical conduct, full, fair and accurate disclosure, compliance with laws, prompt internal reporting and accountability to adherence to the Code of Business Conduct and Ethics.

EXECUTIVE COMPENSATION

The following table sets forth the aggregate compensation paid to our CEO and our next two most highly paid executive officers whose aggregate salary and bonus exceeded \$100,000 for services rendered in all capacities for the fiscal years ended December 31, 2009 and 2008.

Summary Compensation Table

<u>Name and Principal Position</u>	Year	Salary (\$) (1)	Option Awards (\$) (2)	All Other Compensation (3)	Total (\$)
Jeffrey B. Davis Chief Executive Officer	2009	\$ 170,000	\$ -	\$ -	\$ 170,000
	2008	266,076	-	-	266,076
David P. Nowotnik, Ph.D. Senior Vice President Research and Development	2009	\$ 175,675	\$ 87,117	\$ 6,307	\$ 269,099
	2008	253,620	136,977	12,225	402,822
Phillip S. Wise Vice President, Business Development	2009	\$ 200,000	\$ -	\$ 5,209	\$ 205,209
	2008	200,000	136,977	9,876	346,853

(1) Includes amounts deferred under our 401(k) Plan.

(2) The value listed in the above table represents the fair value of the options granted in prior years that was recognized in 2009 and 2008 under ASC 718. Fair value is calculated as of the grant date using a Black-Scholes option-pricing model. The determination of the fair value of share-based payment awards made on the date of grant is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. Our assumptions in determining fair value are described in note 11 to our audited financial statements for the year ended December 31, 2009, included in our Annual Report on Form 10-K.

(3) Amounts reported for fiscal years 2009 and 2008 consist of: (i) amounts we contributed to our 401(k) Plan with respect to each named individual, and (ii) amounts we paid for group term life insurance for each named individual.

Outstanding Equity Awards at Fiscal Year-End

The following table summarizes the aggregate number of option awards held by our named executive officers at December 31, 2009. There were no outstanding stock awards held by any such officers at December 31, 2009:

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)(1)	Option Expiration Date
Jeffrey B. Davis (2)	25,000	-	-	0.63	08/17/16

David P. Nowotnik, Ph.D. ⁽³⁾	75,000	-	-	1.38	05/27/19
	19,791	30,209		3.00	05/21/18
	100,000	-		0.63	08/17/16
	8,000	-		11.60	05/23/15
	5,000	-		29.25	01/23/14
	7,000	-		10.10	01/30/13
	10,000	-		18.65	03/22/12
Phillip S. Wise ⁽⁴⁾	19,791	30,209	-	3.00	05/21/18
	100,000	-		0.63	08/17/16

(1) On December 31, 2009, the closing price of our Common Stock as quoted on the OTC Bulletin Board was \$3.29.

(2) Jeffrey B. Davis' employment agreement started January 4, 2008. The options included in this table were granted to him as a director before he became CEO. Mr. Davis does not have any stock options granted to him as CEO.

(3) Dr. Nowotnik's options to purchase 50,000 shares of common stock will be fully vested in April 2012.

(4) Mr. Wise's options to purchase 50,000 shares of common stock will be fully vested in April 2012.

Compensation Pursuant to Agreements and Plans

Employment Agreements

President and Chief Executive Officer

We are a party to an employment agreement, with Jeffrey B. Davis, who was named by the Board as our Chief Executive Officer, effective as of December 26, 2007. Mr. Davis' employment agreement, dated January 4, 2008, was amended April 9, 2008. Pursuant to the terms of his employment agreement, Mr. Davis was paid an annual salary of \$335,000 from January 4, 2008, through March 31, 2008, and is currently paid an annual salary of \$240,000. From June 1, 2009 through December 31, 2009, Mr. Davis was paid an annual salary of \$120,000, with the unpaid amount deferred. Mr. Davis does not currently have any stock options resulting from his employment with us. Mr. Davis was previously awarded stock options to purchase 600,000 shares of our Common Stock. However, as of January 4, 2008, and pursuant to the amended employment agreement, Mr. Davis agreed to forgo any stock options awarded under the terms of the original employment agreement. Mr. Davis is entitled to similar employee benefits as Access' other executive officers.

Senior Vice President

We entered into to an employment agreement with David P. Nowotnik, Ph.D., our Senior Vice President, Research and Development, on February 1, 2010. Under this agreement, Dr. Nowotnik is entitled to receive an annual base salary of \$290,000, subject to adjustment by the Board. Dr. Nowotnik is also entitled to receive:

- a bonus payable in cash related to the attainment of reasonable performance goals specified by the Board;
- options to purchase 200,000 shares of our Common Stock at an exercise price of \$2.79 per share, with one third options vesting on February 1, 2011 and the remaining two thirds options vesting ratably on February 1, 2012 and February 1, 2013;
- stock options issued from time to time at the discretion of the Board;
- disability benefits up to six months; and
- medical insurance, term life insurance of \$250,000 and long-term disability insurance.

Our agreement with Dr. Nowotnik allows for severance pay to be paid on Dr. Nowotnik's termination for change of control, significant adverse change in the nature or scope of his duties, a merger, consolidation or reorganization. Dr. Nowotnik would receive one and a half times his salary for a period of six months and healthcare coverage for twelve months.

We were a party to an employment agreement with Dr. Nowotnik, until May 31, 2009. Under this agreement, Dr. Nowotnik was entitled to receive an annual base salary of \$253,620, subject to adjustment by the Board. Dr. Nowotnik was eligible to participate in all of our employee benefit programs available to executives. Dr. Nowotnik was also eligible to receive:

- a bonus payable in cash and Common Stock related to the attainment of reasonable performance goals specified by the Board;
- stock options at the discretion of the Board;
- long-term disability insurance to provide compensation equal to at least \$60,000 annually; and
- term life insurance coverage of \$254,000.

On May 31, 2009 and until February 1, 2010, Dr. Nowotnik was a party in a Transition Service Agreement with us pursuant to which his current salary was \$10,000 per month. He was also granted options to purchase 75,000 shares of common stock at \$1.38, of which all options are now vested. The transition services agreement continued a provision for Dr. Nowotnik's healthcare coverage.

Compensation of Directors

Director Compensation Table - 2009

The table below represents the compensation paid to our outside directors during the year ended December 31, 2009:

Name	Fees earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)(1)	All Other Compensation (\$)	Total (\$)
Mark J. Ahn, PhD (2)	-	-	40,000	-	40,000
Mark J. Alvino (3)	-	-	40,000	-	40,000
Esteban Cvitkovic, MD (4)	-	-	115,000	132,000	247,000
Jeffrey B. Davis (5)	-	-	-	-	-
Stephen B. Howell, MD (6)	-	-	40,000	-	40,000
David P. Luci (7)	-	265,000	52,000	83,000	400,000
Steven H. Rouhandeh (8)	-	-	-	-	-

- (1) The value listed represents the fair value of the options recognized as expense under ASC 718 during 2009, including unvested options granted before 2009 and those granted in 2009. Fair value is calculated as of the grant date using a Black-Scholes ("Black-Scholes") option-pricing model. The determination of the fair value of share-based payment awards made on the date of grant is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. Our assumptions in determining fair value are described in note 11 to our audited financial statements for the year ended December 31, 2009, included in our Annual Report on Form 10-K.
- (2) Represents expense recognized in 2009 in respect of options to purchase 35,000 shares of our Common Stock based on a grant date fair value of \$40,000. Dr. Ahn has options to purchase 66,000 shares of our Common Stock at December 31, 2009.
- (3) Represents expense recognized in 2009 in respect of options to purchase 35,000 shares of our Common Stock based on a grant date fair value of \$40,000. Mr. Alvino has options to purchase 66,000 shares of our Common Stock at December 31, 2009.
- (4) Represents expense recognized in 2009 in respect of options to purchase 100,000 shares of our Common Stock based on a grant date fair value of \$115,000. Includes \$132,000 Dr. Cvitkovic received for scientific consulting services in 2009. Dr. Cvitkovic has options to purchase 156,000 shares of our Common Stock and warrants to purchase 200,000 of our Common Stock at December 31, 2009.
- (5) Mr. Davis served as our CEO during 2009 and did not receive any compensation for his services as our director. Mr. Davis' salary and employment agreement are discussed in the Summary Compensation Table and Compensation Pursuant to Agreements and Plans – Employment Agreements – President and Chief Executive Officer.

- (6) Represents expense recognized in 2009 in respect of options to purchase 35,000 shares of our Common Stock based on a grant date fair value of \$40,000. Dr. Howell has options to purchase 79,700 shares of our Common Stock at December 31, 2009.
- (7) Represents \$265,000 of expense recognized in 2009 for stock awards: (a) in respect to 66,667 shares of Common Stock received on June 1, 2009 based on a fair value of \$181,000 per Mr. Luci's consulting agreement and (b) in respect to 60,000 shares of Common Stock received due to the termination of his employment agreement with MacroChem Corporation based on a fair value of \$84,000. Represents expense recognized in 2009 in respect of options to purchase 45,000 shares of our Common Stock based on a grant date fair value of \$52,000. Represents \$83,000 of expense Mr. Luci received for business consulting services in 2009. Mr. Luci has options to purchase 76,000 shares of our Common Stock at December 31, 2009. He also has warrants to purchase 4,167 shares of our Common Stock at December 31, 2009. Mr. Luci resigned as director February 12, 2009.
- (8) Mr. Rouhandeh does not have any options or warrants outstanding at December 31, 2009. See also the Security Ownership of Certain Beneficial Owners and Management.

Compensation of Directors

Each director who is not also an Access employee receives a quarterly fee of \$3,000 and also receives \$1,000 per quarter in aggregate for all the committees in which he/she is a member. The Chairman of the Board is paid an additional \$1,000 per quarter and the Chairman of each of the Audit and Finance and Compensation Committee is paid an additional \$500 per quarter. Each director will have \$2,000 deducted from his or her fee if the director misses more than one Board meeting, and \$1,000 deducted per committee meeting not attended. In addition, Access reimbursed each director, whether an employee or not, the expenses of attending Board and committee meetings. Each non-employee director is also entitled to receive options to purchase 2,500 shares of Common Stock on the date of each annual meeting of stockholders and options to purchase 25,000 shares of Common Stock when he/she is first appointed as a director. The Board granted options to purchase 6,000 shares to each outside director for 2009 instead of the options to purchase 2,500 shares as has been granted historically.

During 2009 director elected to receive options to purchase 25,000 shares of Common Stock for their quarterly fees and annual stock grant. For each committee that a director was a member, he received options to purchase 10,000 shares of Common Stock.

LEGAL PROCEEDINGS

The Company is not currently subject to any material pending legal proceedings.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Security Ownership of Certain Beneficial Owners and Management

Based solely upon information made available to us, the following table sets forth certain information with respect to the beneficial ownership of our common stock and preferred stock as of April 9, 2010 by (i) each person who is known by us to beneficially own more than five percent of any class of our capital stock; (ii) each of our directors; (iii) each of our named executive officers; and (iv) all our executive officers and directors as a group. Beneficial ownership as reported in the following table has been determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended. The address of each holder listed below, except as otherwise indicated, is c/o Access Pharmaceuticals, Inc., 2600 Stemmons Freeway, Suite 176, Dallas, Texas 75207.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership Common Stock ⁽¹⁾	Percent of Class	Amount and Nature of Beneficial Ownership Preferred Stock	Percent of Class	Amount and Nature of Beneficial Ownership All Classes of Stock	Percent of Class
Steven H. Rouhandeh ⁽²⁾	-	*	-	*	-	*
Jeffery B. Davis ⁽³⁾	36,000	*	-	*	36,000	*
Mark J. Ahn, Ph. D. ⁽⁴⁾	66,000	*	-	*	66,000	*
Mark J. Alvino ⁽⁵⁾	66,000	*	-	*	66,000	*
Esteban Cvitkovic, M.D. ⁽⁶⁾	356,000	2.3%	-	*	356,000	1.4%
Stephen B. Howell, M.D. ⁽⁷⁾	89,422	*	-	*	89,422	*
David P. Nowotnik, Ph.D. ⁽⁸⁾	245,436	1.6%	-	*	245,436	*
Phillip S. Wise ⁽⁹⁾	119,794	*	-	*	119,794	*
SCO Capital Partners LLC, SCO Capital Partners LP, and Beach Capital LLC ⁽¹⁰⁾	9,535,087	44.5%	7,077,100	71.1%	16,612,187	52.9%
Larry N. Feinberg ⁽¹¹⁾	1,222,443	7.6%	1,457,699	14.7%	2,680,142	10.3%
Lake End Capital LLC ⁽¹²⁾	1,059,601	6.6%	793,067	8.0%	1,852,668	7.1%
All Directors and Executive Officers as a group (consisting of 8 persons) ⁽¹³⁾	978,652	6.0%	-	*	978,652	3.7%

* - Less than 1%

- (1) Includes our outstanding shares of Common Stock held plus all shares of Common Stock issuable upon exercise of options, warrants and other rights exercisable within 60 days of April 9, 2010.
- (2) Steven H. Rouhandeh is Chairman of SCO Securities LLC, a wholly-owned subsidiary of SCO Financial Group LLC. His address is c/o SCO Capital Partners LLC, 1325 Avenue of the Americas, 27th Floor, New York, NY 10019. SCO Securities LLC and affiliates (SCO Capital Partners LP and Beach Capital LLC) are known to beneficially own an aggregate of 3,481,800 shares of our Common Stock, warrants to purchase an aggregate of 6,053,287 shares of our Common Stock and 7,077,100 shares of Common Stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock. Mr. Rouhandeh disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein.
- (3) Mr. Davis is known to beneficially own an aggregate of 7,333 shares of our Common Stock, presently exercisable options for the purchase of 25,000 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan and 3,667 shares of Common Stock underlying warrants held by Mr. Davis. Mr. Davis is President of SCO Securities LLC, a wholly-owned subsidiary of SCO Financial Group LLC. His address is c/o SCO Capital Partners LLC, 1325 Avenue of the Americas, 27th Floor, New York, NY 10019. SCO Securities LLC and affiliates (SCO Capital Partners LP and Beach Capital LLC) are known to beneficially own 3,481,800 shares of our Common Stock, warrants to purchase an aggregate of 6,053,287 shares of our Common Stock and 7,077,100 shares of Common Stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock. Mr. Davis disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein.
- (4) Includes presently exercisable options for the purchase of 66,000 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan.

- (5) Includes presently exercisable options for the purchase of 66,000 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan. Mr. Alvino is Managing Director of Griffin Securities LLC. His address is c/o Griffin Securities LLC, 17 State St., 3rd Floor, New York, NY 10004. SCO Securities LLC and affiliates (SCO Capital Partners LP and Beach Capital LLC) are known to beneficially own 3,481,800 shares of our Common Stock, warrants to purchase an aggregate of 6,053,287 shares of our Common Stock and 7,077,100 shares of Common Stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock. Mr. Alvino disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein.
- (6) Includes presently exercisable options for the purchase of 156,000 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan and a warrant to purchase 200,000 shares of our Common Stock at an exercise price of \$3.15 per share.
- (7) Dr. Howell is known to beneficially own an aggregate of 9,722 shares of our Common Stock, presently exercisable options for the purchase of 67,200 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan and 12,500 shares of our Common Stock pursuant to the 1995 Stock Option Plan.
- (8) Dr. Nowotnik is known to beneficially own an aggregate of 17,516 shares of our Common Stock, presently exercisable options for the purchase of 197,920 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan and 30,000 shares of our Common Stock pursuant to the 1995 Stock Option Plan.
- (9) Includes presently exercisable options for the purchase of 119,794 shares of our Common Stock pursuant to the 2005 Equity Incentive Plan.
- (10) SCO Capital Partners LLC, SCO Capital Partner LP, Beach Capital LLC and SCO Financial Group's address is 1325 Avenue of the Americas, 27th Floor, New York, NY 10019. SCO Capital Partners LLC and affiliates (SCO Capital Partners LP, Beach Capital LLC and SCO Financial Group) are known to beneficially own an aggregate of 3,481,800 shares of our Common Stock, warrants to purchase an aggregate of 6,053,287 shares of our Common Stock and 7,077,100 shares of Common Stock issuable upon conversion of Series A Cumulative Convertible Preferred Stock. Each of Mr. Rouhandeh, Mr. Davis and Mr. Alvino, directors of Access and Mr. Rouhandeh and Mr. Davis are executives of SCO Capital Partners LLC and disclaim beneficial ownership of such shares except to the extent of their pecuniary interest therein.
- (11) Larry N. Feinberg is a partner in Oracle Partners, L.P. His address is c/o Oracle Partners, L.P., 200 Greenwich Avenue, 3rd Floor, Greenwich, CT 06830. Oracle Partners, L.P. and affiliates (Oracle Institutional Partners, L.P., Oracle Investment Management, Inc., Sam Oracle Fund, Inc. and Mr. Feinberg) are known to beneficially own an aggregate of 493,593 shares of our Common Stock, warrants to purchase an aggregate of 728,850 shares of our Common Stock and Series A Cumulative Convertible Preferred Stock which may be converted into an aggregate of 1,457,699 shares of our Common Stock.
- (12) Lake End Capital LLC's address is 1325 Avenue of the Americas, 27th Floor, New York, NY 10019. Lake End Capital LLC is known to beneficially own an aggregate of 335,575 shares of our Common Stock, warrants to purchase an aggregate of 724,026 shares of our Common Stock and 793,067 shares of Common Stock issuable to them upon conversion of Series A Cumulative Convertible Preferred Stock.
- (13) Does not include shares held by SCO Securities LLC and affiliates.

TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

On occasion we may engage in certain related party transactions. Our policy is that all related party transactions are reviewed and approved by the Board of Directors or Audit Committee prior to the Company entering into any related party transactions.

Dr. Esteban Cvitkovic, a Director, has served as a consultant and Senior Director, Oncology Clinical Research & Development, since August 2007. Dr. Cvitkovic receives payments for consulting expenses, office expenses and reimbursement of direct expenses. Dr. Cvitkovic also has received the following warrants and options for his consulting. In May 2009, Dr. Cvitkovic received options to purchase 75,000 shares of our Common Stock at \$1.38 with all options currently vested and can be exercised until January 4, 2012. In January 2008, Dr. Cvitkovic received warrants to purchase 200,000 shares of our Common Stock at \$3.15 per share that can be exercised until January 4, 2012. The warrants vest over two years in 50,000 share blocks with vesting on July 4, 2008, January 4, 2009, July 4, 2009, and the remaining warrants on January 4, 2010. All of the warrants are currently vested. Dr. Cvitkovic's payments for consulting services and expense reimbursements are as follows:

<u>Year</u>	<u>Consulting Fees</u>	<u>Office Expenses</u>	<u>Expense Reimbursement</u>	<u>Fair Value of exercisable Options / Warrants</u>
2009	\$ 132,000	\$ 18,000	\$ 10,000	\$ 86,000

Mr. Alvino is a principal of Griffin Securities which maintains a banking relationship with the Company.

DESCRIPTION OF SECURITIES

Access' certificate of incorporation authorizes the issuance of 100,000,000 shares of its common stock, \$.01 par value per share, and 2,000,000 shares of preferred stock, \$.01 par value per share, which may be issued in one or more series. Currently, 4,000 shares of preferred stock are designated as Series A Cumulative Convertible Preferred Stock and 300,000 are designated as Series A Junior Participating Preferred Stock. As of April 9, 2010 there were 15,382,755 shares of Access' common stock outstanding and held of record by approximately 6,300 stockholders, and there were 2,985.3617 shares of its Series A Cumulative Convertible Preferred Stock outstanding convertible into 9,951,198 shares of common stock.

Common Stock

Holders of Access' common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and have the right to vote cumulatively for the election of directors. This means that in the voting at Access' annual meeting, each stockholder or his proxy, may multiply the number of his shares by the number of directors to be elected then cast the resulting total number of votes for a single nominee, or distribute such votes on the ballot among the nominees as desired. Holders of Access' common stock are entitled to receive ratably such dividends, if any, as may be declared by Access' Board of Directors out of funds legally available therefor, subject to any preferential dividend rights for Access' outstanding preferred stock. Upon Access' liquidation, dissolution or winding up, the holders of Access' common stock are entitled to receive ratably Access' net assets available after the payment of all debts and other liabilities and subject to the prior rights of any of Access' outstanding preferred stock. Holders of Access' common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of Access' common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Access' preferred stock which Access may designate and issue in the future.

Preferred Stock

Access' Board of Directors is authorized, subject to certain limitations prescribed by law, without further stockholder approval, to issue from time to time up to an aggregate of 2,000,000 shares of preferred stock in one or more series and to fix or alter the designations, preferences, rights and any qualifications, limitations or restrictions of the shares of each such series thereof, including the dividend rights, dividend rates, conversion rights, voting rights and terms of redemption of shares constituting any series or designations of such series. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change of control. The fact that Access' board of directors has the right to issue preferred stock without stockholder approval allowed Access to institute a "poison pill" that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by Access' board of directors.

Access' Board of Directors has designated 4,000 shares of preferred stock as Series A Cumulative Convertible Preferred Stock. The shares of Series A Cumulative Convertible Preferred are convertible at the option of the holder into shares of our common stock at a conversion price of \$3.00 per share of common stock.

The Series A Cumulative Convertible Preferred Stock is entitled to a liquidation preference equal to \$10,000 per share and is entitled to a dividend of 6% per annum, payable semi-annually in cash or if certain conditions are met, in common stock, at the option of the Company at time of payment. Our ability to pay dividends in shares of common stock is limited by among other things a requirement that (i) there is an effective registration statement on the shares of common stock, issuable to the holders of Series A Cumulative Convertible Preferred Stock, in the 20 day period immediately prior to such dividend or (ii) that such shares of common stock referred to in (i) may be sold without restriction pursuant to Rule 144(k) during the 20 day period immediately prior to such dividend.

The Company has the right, but not the obligation, to force conversion of all, and not less than all, of the outstanding Series A Cumulative Convertible Preferred Stock into common stock (i) as long as the closing price of our common stock exceeds \$7.00 for at least 20 of the 30 consecutive trading days immediately prior to the conversion and the average daily trading volume is greater than 100,000 shares per day for at least 20 of the 30 consecutive trading days immediately prior to such conversion, in each case, immediately prior to the date on which we gives notice of such conversion or (ii) if we close a sale of common stock in which the aggregate proceeds are equal to or greater than \$10,000,000. Our ability to cause a mandatory conversion is subject to certain other conditions, including that a registration statement covering the common stock issuable upon such mandatory conversion is in effect and able to be used.

The conversion price of the Series A Cumulative Convertible Preferred Stock is subject to a price adjustment upon the issuance of additional shares of common stock for a price below \$3.00 per share and equitable adjustment for stock splits, dividends, combinations, reorganizations and the like.

The Series A Cumulative Convertible Preferred Stock will vote together with the common stock on an as-if-converted basis.

Holders of Series A Cumulative Convertible Preferred Stock are entitled to purchase their pro rata share of additional stock issuances in certain future financings.

We are a party to a Rights Agreement pursuant to which we agree to provide holders of our common stock with the right to buy shares of preferred stock should a party acquire or beneficially own more than 15% of our common stock without first being exempted by us. Such shares of preferred stock will entitle to the holder to certain voting, dividend and liquidation preferences and is designed to discourage take-over attempts not previously approved by our Board of Directors.

Warrants

As of April 9, 2010, warrants for the issuance of 10,966,565 shares of our common stock were outstanding, all of which are exercisable at a weighted average exercise price of \$2.85 per share, all of which are exercisable through various dates expiring between June 9, 2010 and January 26, 2015. Outstanding warrants to acquire 3,895,047 shares of our common stock include a price protection mechanisms in which the exercise price of these the warrants will automatically be lowered in the event we issue shares of our common stock for a price less than \$3.00 per share.

The descriptions of the warrants are only a summary and are qualified in their entirety by the provisions of the forms of the warrant.

Transfer Agent and Registrar

The transfer agent and registrar of our common stock is American Stock Transfer & Trust Company, New York, New York.

Delaware Law and Certain Charter and By-Law Provisions

Certain anti-takeover provisions.

We are subject to the provisions of Section 203 of the General Corporation Law of Delaware. Section 203 prohibits certain publicly held Delaware corporations from engaging in a "business combination" with an "interested stockholder," for a period of three years after the date of the transaction in which the person became an "interested stockholder", unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an "interested stockholder" is a person or entity who, together with affiliates and associates, owns (or within the preceding three years, did own) 15% or more of the corporation's voting stock. The statute contains provisions enabling a corporation to avoid the statute's restrictions if the stockholders holding a majority of the corporation's voting stock approve our Certificate of Incorporation provides that our directors shall be divided into three classes, with the terms of each class to expire on different years.

In addition, our Certificate of Incorporation, in order to combat "greenmail," provides in general that any direct or indirect purchase by us of any of our voting stock or rights to acquire voting stock known to be beneficially owned by any person or group which holds more than five percent of a class of our voting stock and which has owned the securities being purchased for less than two years must be approved by the affirmative vote of at least two-thirds of the votes entitled to be cast by the holders of voting stock, subject to certain exceptions. The prohibition of "greenmail" may tend to discourage or foreclose certain acquisitions of our securities which might temporarily increase the price of our securities. Discouraging the acquisition of a large block of our securities by an outside party may also have a potential negative effect on takeovers. Parties seeking control of us through large acquisitions of its securities will not be able to resort to "greenmail" should their bid fail, thus making such a bid less attractive to persons seeking to initiate a takeover effort.

We are a party to a Rights Agreement pursuant to which we agree to provide holders of our common stock with the right to buy shares of preferred stock should a party acquire or beneficially own more than 15% of our common stock without first being exempted by us. Such shares of preferred stock will entitle to the holder to certain voting, dividend and liquidation preferences and is designed to discourage take-over attempts not previously approved by our Board of Directors.

Elimination of Monetary Liability for Officers and Directors

Our Certificate of Incorporation incorporates certain provisions permitted under the General Corporation Law of Delaware relating to the liability of directors. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty, including gross negligence, except in circumstances involving certain wrongful acts, such as the breach of director's duty of loyalty or acts or omissions, which involve intentional misconduct or a knowing violation of law. These provisions do not eliminate a director's duty of care. Moreover, these provisions do not apply to claims against a Director for certain violations of law, including knowing violations of federal securities law. Our Certificate of Incorporation also contains provisions to indemnify the directors, officers, employees or other agents to the fullest extent permitted by the General Corporation Law of Delaware. We believe that these provisions will assist us in attracting and retaining qualified individual to serve as directors.

Indemnification of Officers and Directors

Our Certificate of Incorporation also contains provisions to indemnify the directors, officers, employees or other agents to the fullest extent permitted by the General Corporation Law of Delaware. These provisions may have the practical effect in certain cases of eliminating the ability of shareholders to collect monetary damages from directors. We believe that these provisions will assist us in attracting or retaining qualified individuals to serve as our directors.

Disclosure of Commission Position on Indemnification For Securities Act Liabilities

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

PLAN OF DISTRIBUTION

We are registering the shares of common stock on behalf of the selling security holders. Sales of shares may be made by selling security holders, including their respective donees, transferees, pledgees or other successors-in-interest directly to purchasers or to or through underwriters, broker-dealers or through agents. Sales may be made from time to time on the OTC Bulletin Board, any other exchange or market upon which our shares may trade in the future, in the over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices related to market prices, or at negotiated or fixed prices. The shares may be sold by one or more of, or a combination of, the following:

- a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction (including crosses in which the same broker acts as agent for both sides of the transaction);
- purchases by a broker-dealer as principal and resale by such broker-dealer, including resales for its account, pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchases;
- through options, swaps or derivatives;
- in privately negotiated transactions;
- in making short sales or in transactions to cover short sales; and
- put or call option transactions relating to the shares.
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling security holders may effect these transactions by selling shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling security holders and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). The selling security holders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities.

The selling security holders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with those transactions, the broker-dealers or other financial institutions may engage in short sales of the shares or of securities convertible into or exchangeable for the shares in the course of hedging positions they assume with the selling security holders. The selling security holders may also enter into options or other transactions with broker-dealers or other financial institutions which require the delivery of shares offered by this prospectus to those broker-dealers or other financial institutions. The broker-dealer or other financial institution may then resell the shares pursuant to this prospectus (as amended or supplemented, if required by applicable law, to reflect those transactions).

The selling security holders and any broker-dealers that act in connection with the sale of shares may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act of 1933, and any commissions received by broker-dealers or any profit on the resale of the shares sold by them while acting as principals may be deemed to be underwriting discounts or commissions under the Securities Act. The selling security holders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against liabilities, including liabilities arising under the Securities Act. We have agreed to indemnify each of the selling security holders and each selling security holder has agreed, severally and not jointly, to indemnify us against some liabilities in connection with the offering of the shares, including liabilities arising under the Securities Act.

The selling security holders will be subject to the prospectus delivery requirements of the Securities Act. We have informed the selling security holders that the anti-manipulative provisions of Regulation M promulgated under the Securities Exchange Act of 1934 may apply to their sales in the market.

Selling security holders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided they meet the criteria and conform to the requirements of Rule 144.

Upon being notified by a selling security holder that a material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required pursuant to Rule 424(b) under the Securities Act, disclosing:

- the name of each such selling security holder and of the participating broker-dealer(s);
- the number of shares involved;
- the initial price at which the shares were sold;
- the commissions paid or discounts or concessions allowed to the broker-dealer(s), where applicable;
- that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus; and
- other facts material to the transactions.

In addition, if required under applicable law or the rules or regulations of the Commission, we will file a supplement to this prospectus when a selling security holder notifies us that a donee or pledgee intends to sell more than 500 shares of common stock.

We are paying all expenses and fees customarily paid by the issuer in connection with the registration of the shares. The selling security holders will bear all brokerage or underwriting discounts or commissions paid to broker-dealers in connection with the sale of the shares.

EXPERTS

The consolidated financial statements of Access for the years ended December 31, 2009 and 2008 included in this prospectus, and included in the Registration Statement, were audited by Whitley Penn LLP, an independent registered public accounting firm, as stated in their report appearing with the consolidated financial statements herein and incorporated in this Registration Statement, and are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The independent registered public accounting firm named above has no interest in the prospectus.

LEGAL MATTERS

Bingham McCutchen LLP has passed upon the validity of the securities offered hereby. Several partners and attorneys of Bingham McCutchen LLP are also shareholders of Access.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission, Washington, D.C. 20549, under the Securities Act of 1933, a registration statement on Form S-1 relating to the shares of common stock offered hereby. This Prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to our company and the shares we are offering by this Prospectus you should refer to the registration statement, including the exhibits and schedules thereto. You may inspect a copy of the registration statement without charge at the Public Reference Section of the Securities and Exchange Commission at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the Securities and Exchange Commission. The Securities and Exchange Commission also maintains an Internet site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. The Securities and Exchange Commission's World Wide Web address is <http://www.sec.gov>.

We file periodic reports, proxy statements and other information with the Securities and Exchange Commission in accordance with requirements of the Exchange Act. These periodic reports, proxy statements and other information are available for inspection and copying at the regional offices, public reference facilities and Internet site of the Securities and Exchange Commission referred to above. In addition, you may request a copy of any of our periodic reports filed with the Securities and Exchange Commission at no cost, by writing or telephoning us at the following address:

Investor Relations
Access Pharmaceuticals, Inc.
2600 Stemmons Freeway, Suite 176
Dallas, Texas 75207
(214) 905-5100

Information contained on our website is not a prospectus and does not constitute a part of this Prospectus.

You should rely only on the information contained in or incorporated by reference or provided in this Prospectus. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume the information in this Prospectus is accurate as of any date other than the date on the front of this Prospectus.

FINANCIAL STATEMENTS
ACCESS PHARMACEUTICALS, INC.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Access Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Access Pharmaceuticals, Inc. and subsidiaries, as of December 31, 2009 and 2008, and the related consolidated statements of operations, changes in stockholders' equity (deficit), and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Access Pharmaceuticals, Inc. and subsidiaries as of December 31, 2009 and 2008, and the consolidated results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As described in Note 12 to the consolidated financial statements, the Company and MacroChem Corporation were deemed entities under common control related to the acquisition of MacroChem Corporation by the Company on February 25, 2009. The consolidated financial statements as of and for the years ended December 31, 2009 and 2008 have been retroactively restated on a combined basis to reflect the transaction as if it had occurred on January 1, 2008.

As described in Note 9 to the consolidated financial statements, the Company adopted Emerging Issues Task Force Issue No. 07-5, *Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock* (Accounting Standards Codification Topic 815, *Derivatives and Hedging*) effective as of January 1, 2009.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has had recurring losses from operations, negative cash flows from operating activities and has an accumulated deficit. Management's plans in regard to these matters are also described in Note 2. These conditions raise substantial doubt about the Company's ability to continue as a going concern. These consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

/s/ WHITLEY PENN LLP

Dallas, Texas
March 22, 2010

Access Pharmaceuticals, Inc. and Subsidiaries

CONSOLIDATED BALANCE SHEETS

ASSETS	December 31, 2009	December 31, 2008 (See Note 12)
Current assets		
Cash and cash equivalents	\$ 607,000	\$ 2,677,000
Receivables	36,000	147,000
Prepaid expenses and other current assets	42,000	175,000
Total current assets	685,000	2,999,000
Property and equipment, net	50,000	95,000
Patents, net	787,000	999,000
Other assets	61,000	78,000
Total assets	\$ 1,583,000	\$ 4,171,000
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities		
Accounts payable	\$ 4,094,000	\$ 3,287,000
Accrued expenses	857,000	1,295,000
Dividends payable	2,773,000	1,896,000
Accrued interest payable	563,000	145,000
Notes payable	-	825,000
Current portion of deferred revenue	347,000	164,000
Total current liabilities	8,634,000	7,612,000
Derivative liability	9,708,000	-
Long-term deferred revenue	4,730,000	2,245,000
Long-term convertible debt	5,500,000	5,500,000
Total liabilities	28,572,000	15,357,000
Commitments and contingencies		
Stockholders' deficit		
Convertible preferred stock - \$.01 par value; authorized 2,000,000 shares;		
2,992.3617 issued at December 31, 2009; 3,242.8617 issued at December 31, 2008	-	-
Common stock - \$.01 par value; authorized 100,000,000 shares; issued, 13,171,545 at December 31, 2009; issued 9,467,474 at December 31, 2008	132,000	95,000
Additional paid-in capital	215,735,000	225,753,000
Notes receivable from stockholders	(1,045,000)	(1,045,000)
Treasury stock, at cost - 163 shares	(4,000)	(4,000)
Accumulated deficit	(241,807,000)	(235,985,000)
Total stockholders' deficit	(26,989,000)	(11,186,000)
Total liabilities and stockholders' deficit	\$ 1,583,000	\$ 4,171,000

The accompanying notes are an integral part of these consolidated statements.

Access Pharmaceuticals, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS

	December 31,	
	2009	2008
		(See Note 12)
Revenues		
License revenues	\$ 315,000	\$ 118,000
Royalties	37,000	-
Sponsored research and development	-	173,000
Total revenues	352,000	291,000
Expenses		
Research and development	2,657,000	23,235,000
General and administrative	7,112,000	7,463,000
Depreciation and amortization	259,000	324,000
Total expenses	10,028,000	31,022,000
Loss from operations	(9,676,000)	(30,731,000)
Interest and miscellaneous income	29,000	211,000
Interest and other expense	(539,000)	(911,000)
Loss on change in fair value of derivative	(7,154,000)	-
	(7,664,000)	(700,000)
Net loss	(17,340,000)	(31,431,000)
Less preferred stock dividends	(1,886,000)	(3,358,000)
Net loss allocable to common stockholders	\$ (19,226,000)	\$ (34,789,000)
Basic and diluted loss per common share		
Net loss allocable to common stockholders	\$ (1.63)	\$ (4.16)
Weighted average basic and diluted common shares outstanding	11,818,530	8,354,031

The accompanying notes are an integral part of these consolidated statements.

Access Pharmaceuticals, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(See Note 12)

	<u>Common Stock</u>		<u>Preferred Stock</u>		<u>Additional paid-in capital</u>	<u>Notes receivable from stockholders</u>	<u>Treasury stock</u>	<u>Accumulated deficit</u>
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>				
Access-MacroChem as if combined at January 1, 2008	6,085,000	\$ 61,000	3,227.3617	\$ -	\$ 213,782,000	\$ (1,045,000)	\$ (4,000)	\$ (199,892,000)
Common stock issued for services	10,000	-	-	-	27,000	-	-	-
Warrants issued for services	-	-	-	-	350,000	-	-	-
Common stock issued for cash exercise of options	25,000	-	-	-	15,000	-	-	-
Stock option compensation expense	-	-	-	-	922,000	-	-	-
Preferred stock issuances	-	-	272.5000	-	1,687,000	-	-	-
Warrants issued with preferred stock	-	-	-	-	1,142,000	-	-	-
Costs of stock issuances	-	-	-	-	(385,000)	-	-	-
Preferred stock dividend beneficial conversion feature	-	-	-	-	1,308,000	-	-	(1,308,000)
Common stock and warrants issued to Somanta shareholders	1,500,000	15,000	-	-	4,916,000	-	-	-
Common stock and warrants issued to Somanta creditors	538,000	5,000	-	-	1,571,000	-	-	-
Preferred stock converted into common stock	857,000	9,000	(257.0000)	-	(9,000)	-	-	-
Common stock issued for preferred dividends	452,000	5,000	-	-	427,000	-	-	-
Preferred dividends	-	-	-	-	-	-	-	(3,358,000)
Net loss	-	-	-	-	-	-	-	(31,427,000)
Balance, December 31, 2008	9,467,000	95,000	3,242.8617	-	225,753,000	(1,045,000)	(4,000)	(235,985,000)

Cumulative effect of a

change in accounting principle (See Note 9)	-	-	-	-	(15,957,000)	-	-	13,404,000
Restricted common stock issued for services	687,000	8,000	-	-	2,199,000	-	-	-
Warrants issued for services	-	-	-	-	796,000	-	-	-
Common stock issued for cash exercise of options	250,000	2,000	-	-	177,000	-	-	-
Common stock issued for cashless warrant exercises	33,000	-	-	-	-	-	-	-
Preferred stock converted into common stock	836,000	9,000	(250,5000)	-	(9,000)	-	-	-
Common stock issued for preferred dividends	915,000	9,000	-	-	918,000	-	-	-
Stock option compensation expense	-	-	-	-	811,000	-	-	-
Common stock issued to MacroChem noteholders for notes and accrued interest	859,000	8,000	-	-	851,000	-	-	-
Common stock issued to former MacroChem executives	125,000	1,000	-	-	196,000	-	-	-
Preferred dividends	-	-	-	-	-	-	-	(1,886,000)
Net loss	-	-	-	-	-	-	-	(17,340,000)
<hr/>								
Balance, December 31, 2009	<u>13,172,000</u>	<u>\$ 132,000</u>	<u>2,992.3617</u>	<u>\$ -</u>	<u>\$ 215,735,000</u>	<u>\$ (1,045,000)</u>	<u>\$ (4,000)</u>	<u>\$ (241,807,000)</u>

The accompanying notes are an integral part of these consolidated statements.

Access Pharmaceuticals, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,	
	2009	2008
		(See Note 12)
Cash flows from operating activities:		
Net loss	\$ (17,340,000)	\$ (31,431,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock option compensation expense	811,000	922,000
Stock and warrants issued for services	3,200,000	533,000
Acquired in-process research & development	-	18,540,000
Amortization of debt discount and beneficial conversion feature	-	263,000
Loss on change in fair value of derivative	7,154,000	-
Depreciation and amortization	259,000	317,000
Change in operating assets and liabilities:		
Receivables	111,000	(112,000)
Prepaid expenses and other current assets	133,000	(19,000)
Other assets	17,000	(66,000)
Accounts payable and accrued expenses	369,000	260,000
Dividends payable	(82,000)	19,000
Accrued interest payable	452,000	15,000
Deferred revenue	2,668,000	1,435,000
Net cash used in operating activities	(2,248,000)	(9,324,000)
Cash flows from investing activities:		
Capital expenditures	(2,000)	(31,000)
Proceeds from sale of asset	1,000	13,000
Redemption of short-term investments and certificate of deposits	-	759,000
Virium acquisition by MacroChem, net of cash acquired	-	(240,000)
Somanta acquisition, net of cash acquired	-	(65,000)
Net cash provided by (used in) investing activities	(1,000)	436,000
Cash flows from financing activities:		
Proceeds from debt issuance	-	400,000
Payments of notes payable	-	(639,000)
Proceeds from exercise of stock options	179,000	15,000
Proceeds from preferred stock issuances, net of costs	-	2,444,000
Net cash provided by financing activities	179,000	2,220,000
Net decrease in cash and cash equivalents	(2,070,000)	(6,668,000)
Cash and cash equivalents at beginning of year	2,677,000	9,345,000
Cash and cash equivalents at end of year	\$ 607,000	\$ 2,677,000
<i>Supplemental cash flow information:</i>		
<i>Cash paid for interest</i>	\$ 1,000	\$ 568,000
<i>Supplemental disclosure of noncash transactions</i>		
<i>Shares issued for payables, notes payable and accrued interest</i>	859,000	1,576,000
<i>Shares issued for dividends on preferred stock</i>	927,000	432,000
<i>Warrants issued for placement agent fees</i>	-	104,000
<i>Preferred stock dividends in dividends payable</i>	1,886,000	3,358,000
<i>Beneficial conversion feature -</i>		
<i>February 2008 preferred stock dividends</i>	-	857,000
<i>November 2007 preferred stock dividends</i>	-	451,000
<i>Preferred stock issuance costs paid in cash</i>	-	281,000
<i>Debt discount related to MacroChem convertible debt issuance</i>	-	93,000

The accompanying notes are an integral part of these consolidated statements.

Access Pharmaceuticals, Inc. and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Two years ended December 31, 2009

NOTE 1 - NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Access Pharmaceuticals, Inc. is an emerging pharmaceutical company engaged in the development of novel therapeutics for the treatment of cancer and supportive care of cancer patients. This development work is based primarily on the adaptation of existing therapeutic agents using the Company's proprietary drug delivery technology. Our efforts have been principally devoted to research and development, resulting in significant losses since inception on February 24, 1988.

The consolidated balance sheet as of December 31, 2008, contains financial information taken from the audited Access financial statements as of that date and is combined with the audited financial data from MacroChem, as discussed further in Note 12.

On February 25, 2009, we closed our acquisition of MacroChem Corporation through the issuance of an aggregate of approximately 2.5 million shares of our common stock. Prior to our acquisition of MacroChem, SCO, an investment company, held a majority of Access' and MacroChem's voting stock. Specifically, SCO owned 53% of the voting stock of Access and 63% of the voting stock of MacroChem. A non-controlling interest of 37% existed at the merger date of MacroChem. In addition, certain members of SCO's management serve on the board of directors of both Access and MacroChem. Based on these facts, Access and MacroChem were deemed under the common control of SCO. As the entities were deemed under common control, the acquisition was recorded using the pooling-of-interest method and the financial information for all periods presented reflects the financial statements of the combined companies in accordance with Financial Accounting Standards Board standards on business combinations for entities under common control. See also Note 12.

A summary of the significant accounting policies applied in the preparation of the accompanying consolidated financial statements follows.

Principles of Consolidation

The consolidated financial statements include the financial statements of Access Pharmaceuticals, Inc. and our wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Reclassifications

Certain reclassifications to the consolidated financial statements for all prior periods presented have been made to conform to the 2009 presentation.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amount of assets and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reported period. Our significant estimates include primarily those required in the valuation of impairment analysis of intangible assets, fair value of financial instruments, property and equipment, revenue recognition, allowances for doubtful accounts, stock-based compensation and valuation of other equity instruments, valuation allowances for deferred tax assets and tax accruals. Although we believe that adequate accruals have been made for unsettled issues, additional gains or losses could occur in future years from resolutions of outstanding matters. Actual results could differ materially from original estimates.

Segments

The Company operates in a single segment.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. At December 31, 2009 and 2008, we had no such investments. We maintain deposits primarily in two financial institutions, which may at times exceed amounts covered by insurance provided by the U.S. Federal Deposit Insurance Corporation (FDIC). We have not experienced any losses related to amounts in excess of FDIC limits.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is provided using the straight-line method over estimated useful lives ranging from three to seven years. Expenditures for major renewals and betterments that extend the useful lives are capitalized. Expenditures for normal maintenance and repairs are expensed as incurred. The cost of assets sold or abandoned and the related accumulated depreciation are eliminated from the accounts and any gains or losses are recognized in the accompanying consolidated statements of operations of the respective period.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses include, but are not limited to, payroll and personnel expense, lab supplies, preclinical, development cost, clinical trial expense, outside manufacturing and consulting. The cost of materials and equipment or facilities that are acquired for research and development activities and that have alternative future uses are capitalized when acquired.

Fair Value of Financial Instruments

The carrying value of cash, cash equivalents, receivables, accounts payable and accruals approximate fair value due to the short maturity of these items. The carrying value of the convertible long-term debt is at book value which approximates the fair value as the interest rate is at market value.

We consider the conversion options and warrants related to its Series A Cumulative Convertible Preferred Stock to be derivatives, and we record the fair value of the derivative liabilities in our consolidated balance sheets. Changes in fair value of the derivative liabilities are included in loss on change in fair value of derivative in the consolidated statements of operations.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided for deferred tax assets to the extent their realization is in doubt.

We account for income taxes in accordance with FASB ASC 740, *Income Taxes*. Interest costs and penalties related to income taxes are classified as interest expense and general and administrative costs, respectively, in our consolidated financial statements. For the years ended December 31, 2009 and 2008, we did not recognize any interest or penalty expense related to income taxes. It is determined not to be reasonably likely for the amounts of unrecognized tax benefits to significantly increase or decrease within the next 12 months. We are currently subject to a three year statute of limitations by major tax jurisdictions. We and our subsidiaries file income tax returns in the U.S. federal jurisdiction.

Loss Per Share

We have presented basic loss per share, computed on the basis of the weighted average number of common shares outstanding during the year, and diluted loss per share, computed on the basis of the weighted average number of common shares and all dilutive potential common shares outstanding during the year. Potential common shares result from stock options, vesting of restricted stock grants, convertible notes, preferred stock and warrants. However, for all years presented, all outstanding stock options, restricted stock grants, convertible notes and warrants are anti-dilutive due to the losses for the years. Anti-dilutive common stock equivalents of 21,658,171 and 22,051,685 were excluded from the loss per share computation for 2009 and 2008, respectively.

Patents

We expense internal patent and application costs as incurred because, even though we believe the patents and underlying processes have continuing value, the amount of future benefits to be derived therefrom are uncertain. Purchased patents are capitalized and amortized over the life of the patent.

Intangible assets consist of the following (in thousands):

	December 31, 2009		December 31, 2008	
	Gross carrying value	Accumulated amortization	Gross carrying value	Accumulated amortization
Amortizable intangible assets - Patents	<u>\$ 2,624</u>	<u>\$ 1,837</u>	<u>\$ 2,624</u>	<u>\$ 1,625</u>

Amortization expense related to intangible assets totaled \$212,000 and \$229,000 for the years ended December 31, 2009 and 2008, respectively. The aggregate estimated amortization expense for intangible assets remaining as of December 31, 2009 is as follows (in thousands):

2010	\$ 212
2011	212
2012	82
2013	44
2014	44
Thereafter	193
Total	<u>\$ 787</u>

Revenues

Our revenues are generated from licensing and research and development agreements. We recognize revenue in accordance with SEC Staff Accounting Bulletin No. 104 (SAB 104), *Revenue Recognition*. License revenue is recognized over the remaining life of the underlying patent. Research and development revenues are recognized as services are performed.

Stock-Based Compensation

We account for stock based compensation expense in accordance with FASB ASC 718, *Stock Based Compensation*. We have several stock-based compensation plans under which incentive and non-incentive qualified stock options and restricted shares may be granted to employees, directors and consultants. We measure the cost of the employee/director/consultant services received in exchange for an award of equity instruments based on the grant date fair value of the award. We use the Black-Scholes option pricing model to value our options.

During 2009 and 2008, 565,000 stock options and 305,000 stock options, respectively, were granted under the 2005 Equity Incentive Plan. Assumptions for 2009 and 2008 are:

	<u>2009</u>	<u>2008</u>
Expected volatility assumption was based upon a combination of historical stock price volatility measured on a weekly basis and is considered a reasonable indicator of expected volatility.	115%	133%
Risk-free interest rate assumption is based upon U.S. Treasury bond interest rates appropriate for the term of the our employee stock options.	2.37%	2.97%
Dividend yield assumption is based on our history and expectation of dividend payments.	None	None
Estimated expected term (average of number years) is based on the simplified method as prescribed by SAB 107/110 as we do not have sufficient information to calculate an expected term.	5.5 years	6.2 years

At December 31, 2009, the balance of unearned stock-based compensation to be expensed in future periods related to unvested share-based awards, as adjusted for expected forfeitures, is approximately \$632,000. The weighted-average period over which the unearned stock-based compensation is expected to be recognized is approximately three years. We anticipate that we will grant additional share-based awards to employees in the future, which will increase our stock-based compensation expense by the additional unearned compensation resulting from these grants. The fair value of these grants is not included in the amount above, because the impact of these grants cannot be predicted at this time due to the dependence on the number of share-based payments granted.

The weighted-average fair value of options existing under all plans during 2009 was \$2.92 at December 31, 2009.

The following table summarizes stock-based compensation for the years ended December 31, 2009 and 2008 which was allocated as follows (in thousands):

	Year ended December 31, 2009	Year ended December 31, 2008
Research and development	\$ 381	\$ 108
General and administrative	430	814
Stock-based compensation expense included in operating expense	<u>811</u>	<u>922</u>
Total stock-based compensation expense	811	922
Tax benefit	-	-
Stock-based compensation expense, net of tax	<u>\$ 811</u>	<u>\$ 922</u>

Recent Accounting Pronouncements

In June 2009, the Financial Accounting Standards Board (FASB) established the FASB Accounting Standards Codification (ASC) as the source of authoritative accounting principles recognized by the FASB to be applied in preparation of financial statements in conformity with U.S. GAAP. As the issuance of ASC does not change U.S. GAAP, its adoption did not have any impact on our 2009 Financial Statements.

In June 2009, the FASB issued accounting guidance that eliminates the exemption from consolidation for qualifying special-purpose entities, effective for financial asset transfers occurring after the beginning of an entity's first fiscal year that begins after November 15, 2009. We currently do not have any of these entities.

In June 2009, the FASB issued accounting guidance that assists in determining whether an enterprise has a controlling financial interest in a variable interest entity. This guidance is effective as of the beginning of the first fiscal year that begins after November 15, 2009. We currently do not have any such arrangements.

In October 2009, the FASB issued new accounting guidance related to revenue arrangements with multiple deliverables that provides principles for allocation of consideration among an arrangement's multiple-elements, allowing more flexibility in identifying and accounting for separate deliverables. The guidance introduces an estimated selling price method for valuing the elements of a bundled arrangement if vendor-specific objective evidence or third-party evidence of selling price is not available, and significantly expands related disclosure requirements. This guidance is effective on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Alternatively, adoption may be on a retrospective basis, and early application is permitted. We are currently evaluating the impact of adopting this guidance on our financial statements.

NOTE 2 – LIQUIDITY

The accompanying consolidated financial statements have been prepared assuming that we are a going concern. We incurred a net loss in the years ended December 31, 2009 and 2008.

Management believes that our current cash and expected license fees should fund our expected burn rate into the first quarter of 2011. We will require additional funds to continue operations. These funds are expected to come from the future sales of equity and/or license agreements.

NOTE 3 - RELATED PARTY TRANSACTIONS

On February 12, 2008, our Board of Directors elected Steven H. Rouhandeh as director and Chairman of the Board effective as of March 4, 2008. Mr. Rouhandeh is Chief Investment Officer of SCO Capital Partners, L.P.

In the event SCO Capital Partners LLC (SCO) and its affiliates were to convert all of their shares of Series A Preferred Stock and exercise all of their warrants, they would own approximately 56.7% of the voting securities of Access. During 2008 SCO and affiliates were paid \$191,000 in placement agent fees relating to the issuance of preferred stock and were issued warrants to purchase our 39,667 shares of our common stock. SCO and affiliates also were paid \$300,000 in investor relations fees in 2009 and \$232,000 in investor relations fees in 2008.

In connection with the sale and issuance of Series A Preferred Stock and warrants, we entered into a Director Designation Agreement whereby we agreed to continue SCO's right to designate two individuals to serve on the Board of Directors of Access.

Dr. Esteban Cvitkovic, a Director, has served as a consultant and Senior Director, Oncology Clinical Research & Development, since August 2007. Dr. Cvitkovic receives payments for consulting expenses, office expenses and reimbursement of direct expenses. Dr. Cvitkovic also has received the following warrants and options for his consulting. In May 2009, Dr. Cvitkovic received options to purchase 75,000 shares of our Common Stock at \$1.38 with all options currently vested and can be exercised until January 4, 2012. In January 2008, Dr. Cvitkovic received warrants to purchase 200,000 shares of our Common Stock at \$3.15 per share that can be exercised until January 4, 2012. The warrants vest over two years in 50,000 share blocks with vesting on July 4, 2008, January 4, 2009, July 4, 2009, and the remaining warrants on January 4, 2010. All of the warrants are currently vested. Dr. Cvitkovic's payments for consulting services and expense reimbursements are as follows:

<u>Year</u>	<u>Consulting Fees</u>	<u>Office Expenses</u>	<u>Expense Reimbursement</u>	<u>Fair Value of exercisable Options / Warrants</u>
2009	\$ 132,000	\$ 18,000	\$ 10,000	\$ 86,000
2008	\$ 320,000	\$ 30,000	\$ 71,000	\$ 164,000

Stephen B. Howell, M.D., a Director, received payments for consulting services and reimbursement of direct expenses. His consulting agreement expired in March 1, 2008. Dr. Howell's payments for consulting services and expense reimbursements are as follows:

<u>Year</u>	<u>Consulting Fees</u>	<u>Expense Reimbursement</u>
2008	\$ 31,000	\$ 3,000

See Note 10 for a discussion of our Restricted Stock Purchase Program.

NOTE 4 - PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	<u>December 31,</u>	
	<u>2009</u>	<u>2008</u>
Laboratory equipment	\$ 786,000	\$ 831,000
Laboratory and building improvements	58,000	58,000
Furniture and equipment	567,000	568,000
	<u>1,411,000</u>	<u>1,457,000</u>
Less accumulated depreciation and amortization	1,361,000	1,362,000
Net property and equipment	<u>\$ 50,000</u>	<u>\$ 95,000</u>

Depreciation and amortization on property and equipment was \$47,000 and \$96,000 for the years ended December 31, 2009 and 2008, respectively.

NOTE 5 - 401(k) PLAN

We have a tax-qualified employee savings and retirement plan (the 401(k) Plan) covering all our employees. Pursuant to the 401(k) Plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit (\$15,500 in 2009 and 2008) and to have the amount of such reduction contributed to the 401(k) Plan. We had a 401(k) matching program whereby we contributed for each dollar a participant contributes a like amount, with a maximum contribution of 4% of a participant's earnings in the first five months of 2009 and all twelve months in 2008. The Company suspended matching on June 1, 2009. The 401(k) Plan is intended to qualify under Section 401 of the Internal Revenue Code so that contributions by employees or by us to the 401(k) Plan, and income earned on 401(k) Plan contributions, are not taxable to employees until withdrawn from the 401(k) Plan, and so that contributions by us, if any, will be deductible by us when made. At the direction of each participant, we invest the assets of the 401(k) Plan in any of 62 investment options. Company contributions under the 401(k) Plan were approximately \$16,000 in 2009 and \$39,000 in 2008.

NOTE 6 - DEBT

\$5,500,000 due on September 13, 2011. The unsecured convertible note bears interest at 7.7% per annum with \$423,500 of interest due annually on September 13th. During 2009, this investor delayed his interest payments which were due in 2009 until February 1, 2010 or earlier if the Company raised funds in an offering. We raised \$6.2 million in the January 2010 offering and paid the investor interest of \$440,000. At December 31, 2009 in addition to the note of \$5,500,000 an additional \$436,000 of interest was due. This note has a fixed conversion price of \$27.50 per share of common stock and may be converted by the note holder or us under certain circumstances as defined in the note. If the notes are not converted we will have to repay the notes on the due dates.

NOTE 7 – COMMITMENTS AND CONTINGENCIES

Future maturities of the note payable and other obligations are as follows:

<u>Future Maturities</u>	<u>Debt</u>
2011	5,500,000

Operating Leases

At December 31, 2009, we had commitments under non-cancelable operating leases for office and research and development facilities until December 31, 2010 totaling \$77,000. Rent expense for the years ended December 31, 2009 and 2008 was \$111,000 and \$107,000, respectively. We also have one non-cancelable operating lease – for a copier with future obligations totaling approximately \$19,000 ending in 2011 (with \$9,600 expensed each year).

Legal

We are not currently subject to any material pending legal proceedings.

NOTE 8 - FAIR VALUE MEASUREMENTS

The carrying value of cash, cash equivalents, receivables, accounts payable and accruals approximate fair value due to the short maturity of these items. The carrying value of the convertible long-term debt is at book value which approximates the fair value as the interest rate is at market value.

Effective January 1, 2008, we adopted fair value measurement guidance issued by the FASB related to financial assets and liabilities which define fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. This guidance establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar valuation techniques that use significant unobservable inputs.

The guidance requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

We have segregated all financial assets and liabilities that are measured at fair value on a recurring basis (at least annually) into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date in the table below.

Financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2009 and December 31, 2008 are summarized below:

(in thousands)	December 31, 2009			December 31, 2008		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Assets:						
Cash	\$ 607	\$ -	\$ 607	\$ 2,677	\$ -	\$ 2,677
Liabilities:						
Derivative liability	\$ -	\$ 9,708	\$ 9,708	\$ -	\$ -	\$ -

The adoption of this guidance related to financial assets and liabilities on January 1, 2008 and non-financial assets and liabilities on January 1, 2009 did not have a material impact on our consolidated financial statements.

NOTE 9 – PREFERRED STOCK

On November 7, 2007, and February 4, 2008, we entered into securities purchase agreements (the Purchase Agreements) with accredited investors to sell shares of a newly created series of our preferred stock, designated “Series A Cumulative Convertible Preferred Stock”, par value \$0.01 per share, for an issue price of \$10,000 per share, (the Series A Preferred Stock) and agreed to issue warrants to purchase shares of our common stock at an exercise price of \$3.50 per share. The shares of Series A Preferred Stock are convertible into common stock at the initial conversion price of \$3.00 per share.

As a condition to closing, we entered into an Investor Rights Agreement with each of the investors purchasing shares of Series A Preferred Stock, and our Board of Directors approved with respect to the shareholder rights plan any action necessary under our shareholder rights plan to accommodate the issuance of the Series A Preferred Stock and warrants without triggering the applicability of the shareholder rights plan.

In connection with the sale and issuance of Series A Preferred Stock and warrants, we entered into a Director Designation Agreement whereby we agreed to continue SCO’s right to designate two individuals to serve on the Board of Directors of Access.

The issued and outstanding shares of Series A Preferred Stock grants the holders of such preferred stock anti-dilution, dividend and liquidations rights that are superior to those held by the holders of our common stock. Under these terms, should Access issue additional shares of common stock, in certain circumstances, for a price below \$3.00 per share, the conversion price of the Series A Preferred Stock will be lowered to the lowest subsequent issue price below \$3.00 per share until the shares are converted or redeemed. This will have the effect of diluting the holders of our common stock. Under the terms of the Purchase Agreement, should Access issue additional shares of common stock, in certain circumstances, for a price below \$3.50 per share, the exercise price of the warrants will be lowered to the lowest subsequent issue price below \$3.50 per share until the warrants are exercised or expire. Additionally, as discussed below, if we are unable to maintain an effective registration statement related to the Series A Preferred Stock, we would be required to pay liquidating damages.

November 7, 2007 Preferred Stock

On November 7, 2007, we entered into the Purchase Agreements with accredited investors whereby we agreed to sell 954,0001 shares of a newly created series of our Series A Preferred Stock and agreed to issue warrants to purchase 1,589,999 shares of our common stock at an exercise price of \$3.50 per share, for an aggregate purchase price for the Series A Preferred Stock and Warrants of \$9,540,001. The shares of Series A Preferred Stock are convertible into common stock at the initial conversion price of \$3.00 per share.

As a condition to closing, SCO Capital Partners LLC and affiliates, along with the other holders of an aggregate of \$6,000,000 Secured Convertible Notes, also exchanged their notes and accrued interest for an additional 1,836,0512 shares of Series A Preferred Stock and were issued warrants to purchase 1,122,031 shares of our common stock at an exercise price of \$3.50 per share, and Oracle Partners LP and affiliates, along with the other holders of an aggregate of \$4,015,000 Convertible Notes also exchanged their notes and accrued interest for 437,3104 shares of the Series A Preferred Stock and were issued warrants to purchase 728,850 shares of our common stock at an exercise price of \$3.50 per share. In connection with the exchange of the notes, all security interests and liens relating thereto were terminated.

The conversion of debt into equity resulted in a loss on extinguishment of debt of \$11,628,000. This represented the difference between the fair value of the equity interest granted, based on recent sales of identical equity instruments, and the carrying amount of the debt and interest settled.

In connection with the preferred stock offering, we issued warrants for placement agent fees, to purchase a total of 209,000 shares of common stock. All of the warrants are exercisable immediately and expire six years from date of issue. The fair value of the warrants was \$2.59 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 3.84%, expected volatility 110% and a term of 6 years.

February 4, 2008 Preferred Stock

On February 4, 2008, we entered into Purchase Agreements with accredited investors whereby we agreed to sell 272.50 shares of our Series A Preferred Stock and agreed to issue warrants to purchase 454,167 shares of our common stock at an exercise price of \$3.50 per share, for an aggregate purchase price for the Series A Preferred Stock and Warrants of \$2,725,000. Proceeds, net of cash issuance costs from the sale were \$2,444,000. The shares of Series A Preferred Stock are convertible into common stock at the initial conversion price of \$3.00 per share.

The shares of Series A Preferred Stock are initially convertible into common stock at \$3.00 per share. Based on the price of our common stock on February 4, 2008 and the fair value attributed to the attached warrants, a new conversion price was calculated for accounting purposes. As a result of the change in conversion price for accounting purposes the preferred stock was considered to be "in the money". This resulted in a beneficial conversion feature. The preferred stockholder has the right at any time to convert all or any lesser portion of the Series A Preferred Stock into common stock. This resulted in an intrinsic value of the preferred stock. The difference between the implied value of the preferred stock and the beneficial conversion option was treated as preferred stock dividends of \$857,000.

An additional \$451,000 in preferred stock dividends was recorded in the first quarter of 2008 as a result of a prior year correction. The change was due to preferred stock dividends and the beneficial conversion features associated with the warrants issued in connection with the November 2007 preferred stock agreement. We determined that the adjustment would have an immaterial effect to our consolidated financial statements for the years ended December 31, 2008, based on management's qualitative and quantitative analysis relative to its materiality consistent with the applicable accounting guidance.

In connection with the preferred stock offering, we issued warrants for placement agent fees to purchase a total of 45,417 shares of common stock. All of the warrants are exercisable immediately and expire six years from the date of issue. The fair value of the warrants was \$2.29 per share on the date of grant using the Black-Scholes option pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 2.75%, expected volatility 110% and an expected term of 6 years.

Change in Accounting Principle

Effective January 1, 2009, we adopted the provisions of FASB ASC 815, "*Derivatives and Hedging*" (FASB ASC 815) (previously EITF 07-5, "*Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock*"). As a result of adopting FASB ASC 815, warrants to purchase 3,895,047 of our common stock previously treated as equity pursuant to the derivative treatment exemption were no longer afforded equity treatment. These warrants have an exercise price of \$3.50 and expire on November 10, 2013 and February 24, 2014. Effective January 1, 2009, we reclassified the fair value of these common stock warrants, from equity to liability status, as if these warrants were treated as a derivative liability since origination.

We determined that the anti-dilution provision built into the preferred shares and warrants issued should be considered for derivative accounting. FASB ASC 815 requires freestanding contracts that are settled in a company's own stock to be designated as an equity instrument, assets or liability. Under the provisions of FASB ASC 815, a contract designated as an asset or liability must be initially recorded and carried at fair value until the contract meets the requirements for classification as equity, until the contract is exercised or until the contract expires. We determined that the anti-dilution provision associated with the November 2007 and February 2008 preferred shares and warrants no longer met the criteria for equity accounting through the revised criteria in FASB ASC 815. FASB ASC 815 provides for transition guidance whereby a cumulative effect of a change in accounting principle should be recognized as an adjustment to retained earnings and other impacted balance sheet items as of January 1, 2009. The cumulative-effect adjustment is the difference between the amounts recognized prior to adoption and amounts recognized at adoption assuming this guidance had been applied from the issuance date of the preferred stock and warrants.

Accordingly, at January 1, 2009, we determined that the warrants and the preferred stock conversion feature should be accounted for as derivative liabilities. The preferred stock conversion feature was determined to have no fair market value at both issuance dates as well as each reporting period since management asserts that the likelihood of issuing any new equity at a price that would trigger the anti-dilution effect to be nil. We will reevaluate this in future reporting periods to determine if a derivative liability should be recorded. The warrants were valued at issuance and each reporting period since using the Black-Scholes model. Both of these derivatives will continue to be marked to market in accordance with FASB ASC 815.

On January 1, 2009 we reclassified the fair value of the warrants from equity to liability as if these warrants were treated as a derivative liability since their issue date. Additionally, we reclassified \$15,957,000 of previously recorded beneficial conversion features recorded under the previous accounting that related to the preferred stock and warrants. The impact of adoption was a decrease in Additional paid-in capital of \$15,957,000, a decrease in accumulated deficit of \$13,404,000 and an increase in derivative liability of \$2,553,000.

The resulting accounting leads to derivative liability of \$2,553,000 as of January 1, 2009 and \$9,708,000 as of December 31, 2009. We recorded derivative expense of \$7,154,000 for the year ended December 31, 2009.

The fair value of the derivative liability was calculated using the Black-Scholes option pricing model. The assumptions that were used to calculate fair value were as follows.

	<u>January 1, 2009</u>	<u>December 31, 2009</u>
Risk-free interest rate	1.55%	2.69%
Expected volatility	116.31%	117.43%
Expected life (in years)	4.88	3.88
Dividend yield	0.00%	0.00%

As noted above, we were required to adopt this guidance effective January 1, 2009, however we did not apply this guidance to its 2009 Form 10-Q's as required and instead recorded the adoption impact and current year activity in the fourth quarter. The impact, if recorded in the appropriate quarterly period would have been an increase in expense and derivative liability of \$2,104,000, \$2,036,000 and \$1,929,000 for the three months ended March 31, June 30, and September 30, 2009, respectively. Additionally, our Form 10-Q's for 2009 do not reflect the cumulative impact of the change in accounting principle which resulted in a decrease in additional paid-in capital of \$15,957,000, a decrease in accumulated deficit of \$13,404,000 and an increase in derivative liability of \$2,553,000 on January 1, 2009.

Liquidated Damages

Pursuant to the terms of an Investor Rights Agreement with the Purchasers of Series A Preferred Stock, we are required to maintain an effective registration statement. The Securities and Exchange Commission declared the registration statement effective November 13, 2008 relating to a portion of such securities, and as a result, we accrued \$857,000 in potential liquidated damages as of December 31, 2009 and \$675,000 in potential liquidated damages as of December 31, 2008. Potential liquidated damages are capped at 10% of each holder's investment. However, pursuant to the terms of the Investor Rights Agreement, we may not be required to pay such liquidated damages if such shares are saleable without restriction pursuant to Rule 144 of the Securities Act of 1933.

Preferred Stock Dividends

Preferred stock dividends of \$2,773,000 were accrued through December 31, 2009, plus interest. Dividends are required to be paid semi-annually in either cash or common stock.

NOTE 10 – STOCKHOLDERS' EQUITY

Restricted Stock Purchase Program

On October 12, 2000, the Board of Directors authorized a Restricted Stock Purchase Program. Under the Program, the Company's executive officers and corporate secretary were given the opportunity to purchase shares of common stock in an individually designated amount per participant determined by the Compensation Committee of the Board of Directors. A total of 38,000 shares were purchased under the Program by four eligible participants at \$27.50 per share, the fair market value of the common stock on October 12, 2000, for an aggregate consideration of \$1,045,000. The purchase price was paid through the participants' delivery of a 50%-recourse promissory note payable to the Company for three executive officer participants and a full-recourse promissory note payable to the Company for one participant. Each note bears interest at 5.87% compounded semi-annually and has a maximum term of ten years. The notes are secured by a pledge of the purchased shares to the Company. The Company recorded the notes receivable from participants in this Program of \$1,045,000 as a reduction of equity in the Consolidated Balance Sheets. Interest on the notes is neither being collected nor accrued. The stock granted under the Program is fully vested.

Warrants

There were warrants to purchase a total of 9,835,479 shares of common stock outstanding at December 31, 2009. All warrants were exercisable at December 31, 2009, except for warrants to acquire 155,000 shares of common stock. The warrants had various exercise prices and terms as follows:

<u>Summary of Warrants</u>	<u>Warrants Outstanding</u>	<u>Exercise Price</u>	<u>Expiration Date</u>
2009 investor relations advisor (a)	30,000	\$ 3.45	9/15/12
2009 business consultant (b)	150,000	2.07	7/23/14
2009 investor relations advisor (c)	50,000	6.00	8/27/12
2009 investor relations advisor (d)	60,000	1.85	7/14/12
2008 preferred stock offering (e)	499,584	3.50	2/24/14
2008 Somanta accounts payable (f)	246,753	3.50	1/04/14
2008 warrants assumed on acquisition (g)	191,991	18.55-69.57	6/9/10-1/31/12
2008 investor relations advisor (h)	50,000	3.15	1/3/13
2008 investor relations advisor (i)	40,000	3.00	9/1/13
2008 scientific consultant (j)	200,000	3.15	1/4/12
2007 preferred stock offering (k)	3,649,880	3.50	11/10/13
2006 convertible note (l)	3,853,634	1.32	2/16/12
2006 convertible note (l)	386,364	1.32	10/24/12
2006 convertible note (l)	377,273	1.32	12/06/12
2006 investor relations advisor (m)	50,000	2.70	12/27/11
Total	<u>9,835,479</u>		

- a) During 2009, an investor relations advisor received warrants to purchase 30,000 shares of common stock at an exercise price of \$3.45 per share at any time until September 15, 2012, for investor relations consulting services rendered from October 2009 through March 2010. 15,000 of the warrants were exercisable on December 31, 2009 and 15,000 of the warrants will be exercisable – 5,000 on January 31, 2010, 5,000 on February 28, 2010 and 5,000 on March 31, 2010. The fair value of the warrants was \$1.55 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 1.43%, expected volatility 0.87% and a term of 3 years. The expense recorded for the year ended December 31, 2009 was \$24,000.
- b) During 2009, a business consultant received warrants to purchase 150,000 shares of common stock at an exercise price of \$2.07 per share at any time until July 23, 2014, for business consulting services rendered in 2009. 60,000 of the warrants were exercisable on December 31, 2009. The remaining 90,000 warrants may vest in 30,000 share increments with our stock price reaching specified trading prices. The remaining warrants will expire July 23, 2010 if our stock does not reach these specified trading prices. The expense recorded for the year ended December 31, 2009 was \$238,000.
- c) During 2009, an investor relations advisor received warrants to purchase 50,000 shares of common stock at an exercise price of \$6.00 per share at any time until August 27, 2012, for investor relations consulting services rendered in 2009. All 50,000 of the warrants were exercisable at December 31, 2009. The fair value of the warrants was \$2.04 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 1.58%, expected volatility 119% and a term of 3 years. The expense recorded for the year ended December 31, 2009 was \$102,000.
- d) During 2009, an investor relations advisor received warrants to purchase 60,000 shares of common stock at an exercise price of \$1.85 per share at any time until July 14, 2012, for investor relations consulting services rendered in 2009. All 60,000 of the warrants were exercisable on December 31, 2009. The expense recorded for the year ended December 31, 2009 was \$233,000.
- e) In connection with the preferred stock offering in February 2008, warrants to purchase a total of 499,584 shares of common stock were issued. All of the warrants are exercisable immediately and expire six years from date of issue. The fair value of the warrants was \$2.29 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 2.75%, expected volatility 110% and a term of 6 years.
- f) In connection with our acquisition of Somanta Pharmaceuticals, Inc. (Somanta) we exchanged for \$1,576,000 due to Somanta vendors, 538,508 shares of our common stock and warrants to purchase 246,753 shares of common stock at \$3.50. The warrants expire January 4, 2014.
- g) We assumed three warrants in the Somanta acquisition:
- Warrant #1 – 323 shares of our common stock at \$69.57 per share and expires June 9, 2010.
 - Warrant #2 – 31,943 shares of our common stock at \$18.55 per share and expires January 31, 2012.
 - Warrant #3 – 159,725 shares of our common stock at \$23.19 per share and expires January 31, 2012.
- h) During 2008, an investor relations advisor received warrants to purchase 50,000 shares of common stock at an exercise price of \$3.15 per share at any time until January 3, 2013, for investor relations consulting services rendered in 2008. 25,000 of the warrants were exercisable on July 3, 2008 and 25,000 of the warrants will be exercisable January 3, 2009. The fair value of the warrants was \$2.24 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 3.13%, expected volatility 127% and a term of 5 years.

- i) During 2008, an investor relations advisor received warrants to purchase 40,000 shares of common stock at an exercise price of \$3.00 per share at any time until September 1, 2013, for investor relations consulting services. All of the warrants are exercisable. The fair value of the warrants was \$2.61 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 2.37%, expected volatility 132% and a term of 5 years.
- j) During 2008, a director who is also a scientific advisor received warrants to purchase 200,000 shares of common stock at an exercise price of \$3.15 per share at any time until January 4, 2012, for scientific consulting services rendered in 2008. The warrants vest over two years in 50,000 share blocks with vesting on July 4, 2008, January 4, 2009, July 4, 2009 and the remaining shares on January 4, 2010. The fair value of the warrants was \$1.78 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 2.01%, expected volatility 92% and a term of 4 years.
- k) In connection with the preferred stock offering in November 2007, warrants to purchase a total of 3,649,880 shares of common stock were issued. All of the warrants are exercisable immediately and expire six years from date of issue. The fair value of the warrants was \$2.50 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 3.84%, expected volatility 114% and a term of 6 years.
- l) In connection with the convertible note offerings in 2006, warrants to purchase a total of 4,617,271 shares of common stock were issued. All of the warrants are exercisable immediately and expire six years from date of issue.
- m) During 2006, an investor relations advisor received warrants to purchase 50,000 shares of common stock at an exercise price of \$2.70 per share at any time from December 27, 2006 until December 27, 2011, for investor relations consulting services rendered in 2007. All of the warrants are exercisable.

Also, during 2009, an investor relations advisor received warrants for investor relations consulting services rendered in 2009. All of the warrants were exercised into 20,415 shares of common stock. The warrants were exercisable at \$1.85 per share and would have expired July 14, 2012. The expense recorded for the year ended December 31, 2009 was \$36,000.

2001 Restricted Stock Plan

We have a restricted stock plan, the 2001 Restricted Stock Plan, as amended, under which 80,000 shares of our authorized but unissued common stock were reserved for issuance to certain employees, directors, consultants and advisors. The restricted stock granted under the plan generally vests, 25% two years after the grant date with additional 25% vesting every anniversary date. All stock is vested after five years. At December 31, 2009 there were 27,182 shares issued and 52,818 shares available for grant under the 2001 Restricted Stock Plan. All the issued shares are vested.

NOTE 11 - STOCK OPTION PLANS

We account for stock based compensation expense in accordance with FASB ASC 718, *Stock Based Compensation*. We have several stock-based compensation plans under which incentive and non-incentive qualified stock options and restricted shares may be granted to employees, directors and consultants. We measure the cost of the employee/director/consultant services received in exchange for an award of equity instruments based on the grant date fair value of the award.

Our various stock-based employee compensation plans described below:

2005 Equity Incentive Plan

We have a stock awards plan, (the 2005 Equity Incentive Plan), under which 3,150,000 shares of our authorized but unissued common stock were reserved for issuance to employees, consultants, or to non-employee members of the Board or to any board of directors (or similar governing authority) of any affiliate of the Company. The 2005 Equity Incentive Plan replaced the previously approved stock option plan (the 1995 Stock Awards Plan).

For the 2005 Equity Incentive Plan, the fair value of options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions used for grants in fiscal 2009: dividend yield of 0%; volatility of 115%; risk-free interest rate of 2.37%; and expected lives of 5.5 years. The weighted average fair value of options granted was \$1.38 per share during 2009. The assumptions for grants in fiscal 2008 were: dividend yield of 0%; volatility of 133%; risk-free interest rate of 2.97%; and expected lives of 6.2 years. The weighted average fair value of options granted was \$2.73 per share during 2008.

Summarized information for the 2005 Equity Incentive Plan is as follows:

	<u>Options</u>	<u>Weighted- average exercise price</u>
Outstanding options at January 1, 2008	926,386	\$ 1.59
Granted, fair value of \$ 2.73 per share	305,000	3.00
Exercised	(25,250)	0.63
Expired	(69,316)	3.17
Outstanding options at December 31, 2008	<u>1,136,820</u>	1.90
Granted, fair value of \$ 1.38 per share	565,000	1.38
Exercised	(249,916)	0.73
Expired	(16,667)	3.00
Outstanding options at December 31, 2009	<u><u>1,435,237</u></u>	1.99
Exercisable at December 31, 2009	1,215,238	1.80

The intrinsic value of options under this plan related to the outstanding and exercisable options were \$2,112,000 and \$2,050,000 at December 31, 2009, respectively. The intrinsic value of options under this plan related to the outstanding and exercisable options were \$229,000 at December 31, 2008.

The total intrinsic value of options exercised during 2009 was \$642,000 and during 2008 was \$60,000.

Further information regarding options outstanding under the 2005 Equity Incentive Plan at December 31, 2009 is summarized below:

<u>Range of exercise prices</u>	<u>Number of options outstanding</u>	<u>Weighted average</u>		<u>Number of options exercisable</u>	<u>Weighted-average</u>	
		<u>Remaining life in years</u>	<u>Exercise price</u>		<u>Remaining life in years</u>	<u>Exercise price</u>
\$0.63 - 0.85	412,500	7.0	\$0.64	412,500	7.0	\$0.64
\$1.38	460,000	10.0	\$1.38	460,000	10.0	\$1.38
\$2.90 - 7.23	562,737	8.7	\$3.47	342,738	8.2	\$3.75
	<u><u>1,435,237</u></u>			<u><u>1,215,238</u></u>		

2007 Special Stock Option Plan

In January 2007 we adopted the 2007 Special Stock Option Plan and Agreement (the Plan). The Plan provides for the award of options to purchase 450,000 shares of the authorized but unissued shares of common stock of the Company. At December 31, 2009, there were 350,000 additional shares available for grant under the Plan.

Under the 2007 Special Stock Option Plan, 450,000 options were issued in 2007 and 350,000 were forfeited. 100,000 options were outstanding at December 31, 2009 and 2008. 100,000 options in the 2007 Special Stock Option Plan were exercisable at December 31, 2009 and 2008. All of the options had an exercise price of \$2.90 per share and expire March 12, 2010.

1995 Stock Awards Plan

Under the 1995 Stock Awards Plan, as amended, 500,000 shares of our authorized but unissued common stock were reserved for issuance to optionees including officers, employees, and other individuals performing services for us. At December 31, 2009, there were no additional shares available for grant under the 1995 Stock Awards Plan. A total of 103,000 options were outstanding under this plan at December 31, 2009.

Options granted under all the plans generally vest ratably over a four to five year period and are generally exercisable over a ten-year period from the date of grant. Stock options were generally granted with an exercise price equal to the market value at the date of grant.

Summarized information for the 1995 Stock Awards Plan is as follows:

	<u>Options</u>	<u>Weighted- average exercise price</u>
Outstanding options at January 1, 2008	162,417	\$ 15.53
Expired	<u>(44,417)</u>	16.57
Outstanding options at December 31, 2008	118,000	15.14
Expired	<u>(15,000)</u>	10.00
Outstanding options at December 31, 2009	<u><u>103,000</u></u>	15.89
Exercisable at December 31, 2009	103,000	15.89

There was no intrinsic value related to outstanding or exercisable options under this plan at December 31, 2009 or 2008.

Further information regarding options outstanding under the 1995 Stock Awards Plan at December 31, 2009 is summarized below:

<u>Range of exercise prices</u>	<u>Number of options outstanding</u>	<u>Weighted average</u>		<u>Number of options exercisable</u>	<u>Weighted-average</u>	
		<u>Remaining life in years</u>	<u>Exercise price</u>		<u>Remaining life in years</u>	<u>Exercise price</u>
\$10.10 - 12.50	60,640	3.8	\$11.74	60,640	3.8	\$11.74
\$14.05 - 18.65	22,800	2.8	\$16.82	22,800	2.8	\$16.82
\$20.25 - 29.25	19,560	4.1	\$26.58	19,560	4.1	\$26.58
	<u><u>103,000</u></u>			<u><u>103,000</u></u>		

Two directors, who retired from our board of directors May 21, 2008, were granted two years until May 21, 2010 to exercise their vested stock options. This modification resulted in \$100,000 in stock option expense that was recognized in year ended December 31, 2008.

NOTE 12 – MACROCHEM, SOMANTA AND VIRIUM ACQUISITIONS

MacroChem Corporation Acquisition

On February 25, 2009, the Company issued approximately 2,500,000 shares of its common stock in exchange for 100% of the outstanding stock and warrants of MacroChem Corporation (MacroChem). MacroChem's principal activities were to develop and seek to commercialize pharmaceutical products using its proprietary drug delivery technologies. Its portfolio of proprietary product candidates was based on its drug delivery technologies: Soft Enhancement of Percutaneous Absorption (SEPA), MacroDerm and DermaPass. Its SEPA topical drug delivery technology enhances the efficiency and rate of diffusion of drugs into and through the skin. MacroChem had two clinical stage investigational new drugs: EcoNail, for the treatment of fungal infections of the nails and Pexiganan, for the treatment of mild diabetic foot infection (DFI).

Prior to our acquisition of MacroChem, SCO, an investment company, held a majority of Access' and MacroChem's voting stock. Specifically, SCO owned 53% of the voting stock of Access and 63% of the voting stock of MacroChem. A non-controlling interest of 37% existed at the merger date of MacroChem. In addition, certain members of SCO's management serve on the board of directors of both Access and MacroChem. Based on these facts, Access and MacroChem were deemed under the common control of SCO. As the entities were deemed under common control, the acquisition was recorded similar to the pooling-of-interest method and the financial information for all periods presented reflects the financial statements of the combined companies in accordance with Financial Accounting Standards Board standards on business combinations for entities under common control.

Upon acquisition, all outstanding warrants and any other dilutive instruments in MacroChem's stock were cancelled. The in-the-money warrants were converted with the common stock. In addition to the merger, the noteholders of MacroChem agreed to exchange their notes and interest due on the notes in the total amount of \$859,000 for 859,000 restricted shares of the Access' common stock. The value of the shares issued was determined based on the carrying value of the debt, which was established to be the more readily determinable fair value.

In addition, we issued 125,000 shares of Access common stock to former executives of MacroChem for the settlement of employment agreements.

In connection with the exchange of equity interests, \$106,000 in merger costs were expensed.

The income statement for all periods presented reflects the combined carrying amount of revenue and expenses. Below is a reconciliation of summary financial data for the year ended December 31, 2009 and the combined MacroChem financial data for the year ended December 31, 2008. The balance sheet as of December 31, 2008 also reflects the combined entities.

Following is a summary balance sheet at December 31, 2008:

	Access Pharmaceuticals	MacroChem Corporation	Combined
Current assets	\$ 3,550,000	\$ 84,000	\$ 2,999,000
Total assets	4,257,000	549,000	4,171,000
Current liabilities	4,906,000	3,346,000	7,612,000
Long-term deferred revenue	2,245,000	24,000	2,245,000
Long-term debt	5,500,000	-	5,500,000
Stockholders' deficit	(8,394,000)	(2,925,000)	(11,186,000)

Intercompany receivables/payables of \$635,000 and intercompany deferred revenue of \$29,000 were eliminated.

Following is a summary statement of combined operations for the year ended December 31, 2009 and December 31, 2008:

	For the year ended December 31, 2009			For the year ended December 31, 2008		
	Access	MacroChem	Combined	Access	MacroChem	Combined
	Pharmaceuticals	Corporation		Pharmaceuticals	Corporation	
Total revenues	\$ 352,000	\$ -	\$ 352,000	\$ 291,000	\$ -	\$ 291,000
Expenses						
Research and development	2,645,000	12,000	2,657,000	12,613,000	10,622,000	23,235,000
General and administrative	6,932,000	180,000	7,112,000	4,340,000	3,123,000	7,463,000
Depreciation and amortization	207,000	52,000	259,000	253,000	71,000	324,000
Total expenses	9,784,000	244,000	10,028,000	17,206,000	13,816,000	31,022,000
Loss from operations	(9,432,000)	(244,000)	(9,676,000)	(16,915,000)	(13,816,000)	(30,731,000)
Interest and miscellaneous						
Income	29,000	-	29,000	178,000	33,000	211,000
Interest and other expense	(513,000)	(26,000)	(539,000)			
Change in fair value of derivative	(7,154,000)	-	(7,154,000)	(478,000)	(433,000)	(911,000)
	(7,638,000)	(26,000)	(7,664,000)	(300,000)	(400,000)	(700,000)
Loss from operations	(17,070,000)	(270,000)	(17,340,000)	(17,215,000)	(14,216,000)	(31,431,000)
Less preferred stock						
Dividends	(1,886,000)	-	(1,886,000)	(3,358,000)	-	(3,358,000)
Net loss allocable to common stockholders	\$ (18,956,000)	\$ (270,000)	\$ (19,226,000)	\$ (20,573,000)	\$ (14,216,000)	\$ (34,789,000)
Basic and diluted loss per common share						
Net loss allocable to common stockholders	-	-	\$ (1.63)	-	-	\$ (4.16)
Weighted average basic and diluted common shares outstanding	-	-	11,818,530	-	-	8,354,031

Somanta Pharmaceuticals, Inc. Acquisition

On January 4, 2008, we acquired all the outstanding shares of Somanta Pharmaceuticals, Inc (“Somanta”). Somanta was engaged in the pharmaceutical development business. We anticipate that the acquisition will add additional product pipelines and complement our existing product pipelines. Total consideration paid in connection with the acquisition included:

- Approximately 1.5 million shares of Access common stock were issued to the common and preferred shareholders of Somanta as consideration having a value of approximately \$4,650,000 (the value was calculated using Access’ stock price on January 4, 2008, times the number of shares issued);
- exchange of all outstanding warrants for Somanta common stock for warrants to purchase 191,991 shares of Access common stock at exercise prices ranging between \$18.55 and \$69.57 per share. The warrants were valued at approximately \$281,000. All of the warrants are exercisable immediately and expire approximately four years from date of issue. The weighted average fair value of the warrants was \$1.46 per share on the date of the grant using the Black-Scholes pricing model with the following assumptions: expected dividend yield 0.0%, risk-free interest rate 3.26%, expected volatility 114% and an expected term of approximately 4 years;
- paid an aggregate of \$475,000 in direct transaction costs; and
- cancelled receivable from Somanta of \$931,000.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the date of the acquisition (in thousands) based on a valuation.

Cash	\$	1
Prepaid expenses		25
Office equipment		14
Accounts payable		(2,582)
In-process research & development		8,879
	\$	<u>6,337</u>

Approximately \$8,879,000 of the purchase price represents the estimated fair value of the acquired in-process research and development projects that have no alternative future use. Accordingly this amount was immediately expensed as research and development in the consolidated statement of operations upon the acquisition date.

Operating results of Somanta have been included in our consolidated financial statements since January 4, 2008.

The following unaudited pro forma information presents the 2008 results of the Company as if the acquisition had occurred on January 1, 2008. The unaudited pro forma results are not necessarily indicative of results that would have occurred had the acquisition been in effect for the periods presented, nor are they necessarily indicative of future results. No significant operations occurred after October 31, 2007 until the acquisition on January 4, 2008. Amounts are shown in thousands.

	Twelve months ended December 31, 2008	
Net loss allocable to common stockholders	\$	(20,573)
Net loss per common shares (basic and diluted)	\$	(3.51)
Weighted average common shares outstanding (basic and diluted)		5,854

Virium Pharmaceuticals, Inc. Acquisition by MacroChem Corporation

On April 18, 2008, the MacroChem acquired Virium Pharmaceuticals Inc. (“Virium”), a privately held biotechnology company focused primarily on oncology based technology, pursuant to the terms of an Agreement and Plan of Merger (the Merger Agreement) dated as of April 18, 2008 by and among the Company, VRM Acquisition, LLC, a Delaware limited liability company and a direct wholly-owned subsidiary of the Company (VRM Acquisition), Virium and Virium Holdings, Inc., a non-public Delaware corporation (Holdings) and the parent of Virium. On the Effective Date, VRM Acquisition merged with and into Virium with Virium continuing as the surviving company and a wholly-owned subsidiary of the Company (the Merger). Pursuant to the Merger Agreement, each share of Virium common stock outstanding at the Effective Time was converted into the right to receive 0.89387756 shares of MacroChem’s common stock (the Merger Consideration) resulting in an aggregate of 22,898,386 shares of MacroChem common stock being issued in the Merger. The fair value of the shares issued on the closing date to the stockholders of Virium was \$6,870,000.

Virium had a pipeline of oncology products that target a variety of niche cancer indications. Virium’s product pipeline included a next generation nucleoside analogue (small molecule) which it had licensed from the Southern Research Institute in August 2007. This class of compounds has demonstrated proven efficacy in certain hematological cancer indications.

As described in more detail below, MacroChem assumed convertible notes of Virium.

On April 23, 2008, MacroChem assumed all obligations under the convertible promissory note in the aggregate principal amount of \$500,000 issued to Strategic Capital Resources, Inc. by Virium on May 30, 2007 (the First Convertible Note). The First Convertible Note was due to mature on April 25, 2008. The First Convertible Note had a 12% annual interest rate until November 30, 2007, which increased to 15% thereafter. MacroChem paid to Strategic Capital Resources, Inc. \$45,000 in cash which represents all accrued and unpaid interest on such note through the date of consummation of the Merger plus \$10,000. MacroChem made this payment in consideration of Strategic Capital Resources, Inc.’s prior agreement with Virium to extend the maturity date on its note from March 26, 2008 to April 25, 2008.

On June 6, 2008, MacroChem repaid a principal amount of \$400,000 to the holder of the First Convertible Note together with accrued and unpaid interest thereon. Further, on June 23, 2008, the Company repaid the unpaid principal balance of \$100,000 together with accrued and unpaid interest thereon to the remaining holder of the First Convertible Note. Additionally, the First Convertible Note was repaid, in part, with funds from new holders of convertible promissory notes whose notes mature on December 6, 2008. The new promissory notes have a principal amount of \$400,000 and a warrant to purchase 100,000 shares of common stock at \$.01. The fair value of the warrants issued of \$24,000 is recorded as debt discount and is being amortized to interest expense over the term of the debt. The notes have a 12% interest rate with accrued interest due on or prior to the 5th day of each calendar month. These notes are due to mature on the earlier of 1) closing of the next financing by MacroChem or 2) December 6, 2008. The default status of these notes triggered the convertibility of 50% of the principal at a rate of \$0.018, which is 50% of the average market price for five days preceding the triggering event. This resulted in a beneficial conversion feature with a value of \$188,000 recorded to interest expense and additional paid-in capital. The principal amount of \$400,000 in notes was outstanding at December 31, 2008 and continued to accrue interest until February 25, 2009, the date of the acquisition by Access.

MacroChem also assumed on the Effective Date all obligations under convertible promissory notes in the aggregate principal amount of \$500,000 issued by Virium on December 12, 2007 (the Second Convertible Notes). The Second Convertible Notes were to mature on the earlier of (a) the closing of any equity financing by MacroChem or (b) June 12, 2008. The Second Convertible Notes have a 12% annual interest rate with all accrued interest due at maturity. Upon written consent to the borrower, simultaneously with the next round of financing, the holders have the ability to convert the entire outstanding principal and all accrued interest into shares. The conversion price will be equal to 50% of the qualified offering price.

In June 2008, a principal amount of \$425,000 of the Second Convertible Notes were extended to a maturity of December 31, 2008, subject to certain conditions and the Company repaid holders of the Second Convertible Notes a principal amount of \$75,000 and accrued interest of \$5,000. To induce the holders to extend the maturity, MacroChem issued 212,500 warrants to purchase common stock at \$.01. The fair value of the warrants issued of \$51,053 is recorded as debt discount and will be amortized to interest expense over the term of the debt. The principal amount of \$425,000 in notes was outstanding at December 31, 2008 and continued to accrue interest until February 25, 2009, the date of the acquisition by Access.

The acquisition of Virium on April 18, 2008 was accounted for by MacroChem under the purchase method of accounting in accordance with SFAS No. 141 "*Business Combinations*". Under the purchase method, assets acquired and liabilities assumed by MacroChem were recorded at their estimated fair values at the date of acquisition and the results of operations of the acquired company were consolidated with those of MacroChem from the date of acquisition. Virium is included in the Statement of Operations from the acquisition date on April 18, 2008.

The total purchase price of \$9,661,000, has been primarily allocated to be in-process research and development and is comprised of \$6,870,000 related to the calculated value of MacroChem's common stock issued of \$0.30 per share, \$2,404,000 of liabilities MacroChem assumed in addition to \$147,000 of warrants issued to certain debt holders. Additionally, MacroChem incurred \$240,000 in professional fees.

The components of the purchase price, which we have allocated to in-process research and development, are summarized as follows:

Common stock issued	6,870,000
Liabilities assumed	2,404,000
Warrants related to debt assumed	147,000
Transaction costs	<u>240,000</u>
Total purchase price	<u><u>9,661,000</u></u>

The following unaudited pro forma information presents the 2008 results of MacroChem as if the acquisition had occurred on January 1, 2008. The unaudited pro forma results are not necessarily indicative of results that would have occurred had the acquisition been in effect for the periods presented, nor are they necessarily indicative of future results.

	2008 <u>(unaudited)</u>
Net income (loss)	<u>(10,564,000)</u>
Net income (loss) per common share (basic and diluted)	(0.23)
Weighted average common shares outstanding (basic and diluted)	45,754,492

NOTE 13 - INCOME TAXES

Income tax expense differs from the statutory amounts as follows:

	<u>2009</u>	<u>2008</u>
Income taxes at U.S. statutory rate	\$ (6,537,000)	\$ (10,477,000)
Change in valuation allowance	5,182,000	6,987,000
Benefit of foreign losses not recognized	57,000	59,000
Expenses not deductible	623,000	2,874,000
Expiration of net operating loss and general business credit carryforwards, net of revisions	<u>675,000</u>	<u>557,000</u>
Total tax expense	<u>\$ -</u>	<u>\$ -</u>

Deferred taxes are provided for the temporary differences between the financial reporting bases and the tax bases of our assets and liabilities. The temporary differences that give rise to deferred tax assets were as follows:

	<u>December 31,</u>	
	<u>2009</u>	<u>2008</u>
Deferred tax assets		
Net operating loss carryforwards	\$ 62,358,000	\$ 59,939,000
General business credit carryforwards	2,371,000	2,472,000
State credits	3,126,000	3,138,000
Property, equipment and goodwill	51,000	54,000
Stock options	773,000	497,000
Derivatives	2,432,000	-
Deferred revenue	748,000	324,000
Intangible assets	383,000	383,000
Accrued interest	-	253,000
Other	<u>270,000</u>	<u>270,000</u>
Gross deferred tax assets	<u>72,512,000</u>	<u>67,330,000</u>
Valuation allowance	<u>(72,512,000)</u>	<u>(67,330,000)</u>
Net deferred taxes	<u>\$ -</u>	<u>\$ -</u>

At December 31, 2009, we had approximately \$183,404,000 of net operating loss carryforwards and approximately \$2,371,000 of general business credit carryforwards. These carryforwards expire as follows:

	Net operating <u>loss carryforwards</u>	General business <u>credit carryforwards</u>
2010	\$ 2,171,000	\$ 140,000
2011	4,488,000	13,000
2012	4,212,000	77,000
2013	3,324,000	112,000
2014	3,306,000	95,000
Thereafter	165,903,000	1,934,000
	<u>\$ 183,404,000</u>	<u>\$ 2,371,000</u>

As a result of a merger on January 25, 1996, a change in control occurred for federal income tax purposes, which limits the utilization of pre-merger net operating loss carryforwards of approximately \$3,100,000 to approximately \$530,000 per year.

Additionally, we acquired MacroChem Corporation on February 25, 2009 and Somanta Pharmaceuticals, Inc. on January 4, 2008. Both corporations were loss companies at the time of the acquisition. Therefore, the net operating losses related to those acquisitions may be subject to annual limitations as provided by IRC Sec. 382.

We account for income taxes in accordance with FASB ASC 740, *Income Taxes*. Interest costs and penalties related to income taxes are classified as interest expense and general and administrative costs, respectively, in our consolidated financial statements. For the years ended December 31, 2009 and 2008, we did not recognize any interest or penalty expense related to income taxes. It is determined not to be reasonably likely for the amounts of unrecognized tax benefits to significantly increase or decrease within the next 12 months. We are currently subject to a three year statute of limitations by major tax jurisdictions. We and our subsidiaries file income tax returns in the U.S. federal jurisdiction.

NOTE 14 – SUBSEQUENT EVENTS (UNAUDITED)

On January 22, 2010, we announced the sale of approximately 2.10 million shares of our common stock and warrants to purchase approximately 1.05 million shares of our common stock for gross proceeds of approximately \$6.3 million. We sold the shares and warrants for \$3.00 per unit (each unit consisting of one share of common stock and a warrant to purchase 0.5 shares of common stock). The exercise price of the warrants is \$3.00 per share.

No dealer, salesperson or other person has been authorized to give any information or to make any representations other than those contained in this Prospectus in connection with the offering made by this Prospectus, and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or the selling stockholders. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than those specifically offered hereby or an offer to sell or a solicitation of an offer to buy any of these securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation. Except where otherwise indicated, this Prospectus speaks as of the effective date of the Registration Statement. Neither the delivery of this Prospectus nor any sale hereunder shall under any circumstances create any implication that there has been no change in the affairs of the Company since the date hereof.

1,041,431 Shares of Common Stock

ACCESS PHARMCEUTICALS, INC.

PROSPECTUS

April __, 2010

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

Expenses of the Registrant in connection with the issuance and distribution of the securities being registered, are estimated as follows:

SEC Registration Fee	\$ 1,395
Printing and Engraving Expenses	\$ 1,000
Legal Fees and Expenses	\$ 15,000
Accountants' Fees and Expenses	\$ 10,000
Miscellaneous Costs	\$ 10,000
Total	\$ 37,395

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation law empowers a Delaware corporation to indemnify its officers and directors and certain other persons to the extent and under the circumstances set forth therein.

The our Certificate of Incorporation, as amended, and By-laws, as amended, provide for indemnification of our officers and directors and certain other persons against liabilities and expenses incurred by any of them in certain stated proceedings and under certain stated conditions.

The above discussion of the Registrant's Certificate of Incorporation, as amended, By-laws, as amended, and Section 145 of the Delaware General Corporation Law is not intended to be exhaustive and is qualified in its entirety by such Certificate of Incorporation, By-Laws and statute.

Item 15: Recent Sales of Unregistered Securities

In January 2010 thru March 2010, we issued 6,249 shares of our common stock to an employee for their employment agreement. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In January 2010, we issued 66,667 shares of our common stock to a consultant for his consulting expenses. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended

In December 2009, we issued 20,000 shares of our common stock to an individual as payment for his expenses due to a settlement of his investor agreement and 25,000 shares of our common stock to a new employee for their employment agreement. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In September 2009, we issued 275,500 shares of our common stock to several consultants as payment for their consulting expenses. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In August 2009, we issued 170,000 shares of our common stock to several consultants as payment for their consulting expenses. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In July 2009, we issued 70,000 shares of our common stock to several consultants as payment for their consulting expenses. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

On June 9, 2009, we issued 30,000 shares of our common stock to a former executive of MacroChem for the settlement of his employment agreement. The settlement agreements specify that a portion of the settlement be paid in common stock. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In June 2009, we issued 126,667 shares of our common stock to several consultants as payment for their consulting expenses. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

On February 25, 2009, we issued 859,172 shares of our common stock to cancel approximately \$859,000 of notes and accrued interest due to holders of MacroChem notes. The value of the shares issued was determined based on the carrying value of the debt, which was established to be the more readily determinable fair value. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

In addition, we issued 95,000 shares of our common stock to former executives of MacroChem for the settlement of employment agreements. The settlement agreements specify that a portion of the settlement be paid in common stock. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

On February 4, 2008, we entered into securities purchase agreements (the "Purchase Agreements") with accredited investors whereby we agreed to sell 272.50 shares of our "Series A Cumulative Convertible Preferred Stock", par value \$0.01 per share, for an issue price of \$10,000 per share, (the "Series A Cumulative Convertible Preferred Stock") and agreed to issue warrants to purchase 499,584 shares of our common stock at an exercise price of \$3.50 per share, for an aggregate purchase price for the Series A Cumulative Convertible Preferred Stock and Warrants of \$2,725,000. Proceeds, net of issuance costs from the sale were \$2,444,000. The shares of Series A Cumulative Convertible Preferred Stock are convertible into common stock at the initial conversion price of \$3.00 per share subject to adjustment.

In addition, \$1,576,000 of Somanta Pharmaceuticals' acquired accounts payable were settled by issuing 538,508 shares of Access common stock and warrants to purchase 246,753 shares of our common stock at an exercise price of \$3.50 per share. The value of the shares and warrants issued was determined based on the fair value of the accounts payable. The issuance of shares of our common stock in settlement of these accounts was made pursuant to Section 4(2) and Rule 506 of the Securities Act of 1933, as amended.

On November 7, 2007, we entered into securities purchase agreements (the "Purchase Agreements") with accredited investors whereby we agreed to sell 954.0001 shares of a newly created series of our preferred stock, designated "Series A Cumulative Convertible Preferred Stock", par value \$0.01 per share, for an issue price of \$10,000 per share, (the "Series A Cumulative Convertible Preferred Stock") and agreed to issue warrants to purchase 1,589,999 shares of our common stock at an exercise price of \$3.50 per share, subject to adjustment, for an aggregate purchase price for the Series A Cumulative Convertible Preferred Stock and Warrants of \$9,540,001. The shares of Series A Cumulative Convertible Preferred Stock are convertible into common stock at the initial conversion price of \$3.00 per share subject to adjustment.

All of the above-described issuances were exempt from registration pursuant to Section 4(2) of the Securities Act or Rule 506 of Regulation D promulgated thereunder, as transactions not involving a public offering.

Item 16. Exhibits

The following is a list of exhibits filed as a part of this registration statement:

Exhibit

Number Description of Document

- 2.1 Amended and Restated Agreement of Merger and Plan of Reorganization between the Registrant and Chemex Pharmaceuticals, Inc., dated as of October 31, 1995 (Incorporated by reference to Exhibit A of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 2.2 Agreement and Plan of Merger, by and among the Registrant, Somanta Acquisition Corporation, Somanta Pharmaceuticals, Inc., Somanta Incorporated and Somanta Limited, dated April 19, 2007 (Incorporated by reference to Exhibit 2.1 to our Form 8-K dated April 18, 2007)
- 2.3 Agreement and Plan of Merger, by and among the Registrant, MACM Acquisition Corporation and MacroChem Corporation, dated July 9, 2008 (Incorporated by reference to Exhibit 2.3 of our Form 10-Q for the quarter ended June 30, 2008)
- 3.1 Certificate of Incorporation (Incorporated by reference to Exhibit 3(a) of our Form 8-K dated July 12, 1989, Commission File Number 9-9134)
- 3.2 Certificate of Amendment of Certificate of Incorporation filed August 13, 1992 (Incorporated by reference to Exhibit 3.3 of our Form 10-K for year ended December 31, 1995)
- 3.3 Certificate of Merger filed January 25, 1996 (Incorporated by reference to Exhibit E of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 3.4 Certificate of Amendment of Certificate of Incorporation filed January 25, 1996 (Incorporated by reference to Exhibit E of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 3.5 Certificate of Amendment of Certificate of Incorporation filed July 18, 1996 (Incorporated by reference to Exhibit 3.7 of our Form 10-K for the year ended December 31, 1996)
- 3.6 Certificate of Amendment of Certificate of Incorporation filed June 18, 1998. (Incorporated by reference to Exhibit 3.8 of our Form 10-Q for the quarter ended June 30, 1998)
- 3.7 Certificate of Amendment of Certificate of Incorporation filed July 31, 2000 (Incorporated by reference to Exhibit 3.8 of our Form 10-Q for the quarter ended March 31, 2001)
- 3.8 Certificate of Designations of Series A Junior Participating Preferred Stock filed November 7, 2001 (Incorporated by reference to Exhibit 4.1.H of our Registration Statement on Form S-8 dated December 14, 2001, Commission File No. 333-75136)
- 3.9 Amended and Restated Bylaws (Incorporated by reference to Exhibit 2.1 of our Form 10-Q for the quarter ended June 30, 1996)
- 3.10 Certificate of Designation, Rights and Preferences of Series A Cumulative Convertible Preferred Stock filed November 9, 2007 (Incorporated by reference to Exhibit 3.10 to our Form SB-2 filed on December 10, 2007.
- 3.11 Certificate of Amendment to Certificate of Designations, Rights and Preferences of Series A Cumulative Convertible Preferred Stock filed June 11, 2008 (Incorporated by reference to Exhibit 3.11 of our Form 10-Q for the quarter ended June 30, 2008)
- 5.1 Opinion of Bingham McCutchen LLP (Incorporated by reference to Exhibit 5.1 of our Form S-1/A filed on January 21, 2010)
- 10.1* 1995 Stock Option Plan (Incorporated by reference to Exhibit F of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 10.2* Amendment to 1995 Stock Option Plan (Incorporated by reference to Exhibit 10.25 of our Form 10-K for the year ended December 31, 2001)
- 10.3 Lease Agreement between Pollock Realty Corporation and the Registrant dated July 25, 1996 (Incorporated by reference to Exhibit 10.19 of our Form 10-Q for the quarter ended September 30, 1996)
- 10.4 Platinate HPMA Copolymer Royalty Agreement between The School of Pharmacy, University of London and the Registrant dated November 19, 1996 (Incorporated by reference to Exhibit 10.9 of our Form 10-K for the year ended December 31, 1996)
- 10.5* 401(k) Plan (Incorporated by reference to Exhibit 10.20 of our Form 10-K for the year ended December 31, 1999)
- 10.6 Form of Convertible Note (Incorporated by reference to Exhibit 25 of our Form 10-Q for the quarter ended September 30, 2000)
- 10.7 Rights Agreement dated as of October 31, 2001 between the Registrant and American Stock Transfer & Trust Company, as Rights Agent (Incorporated by reference to Exhibit 99.1 of our Current Report on Form 8-K dated November 7, 2001)

- 10.8 Amendment to Rights Agreement dated as of February 16, 2006 between the Registrant and American Stock Transfer & Trust Company, as Rights Agent (Incorporated by reference to Exhibit 10.33 of our Form 10-Q for the quarter ended March 31, 2006)
- 10.9 Amendment to Rights Agreement dated as of November 9, 2007 between the Registrant and American Stock Transfer & Trust Company as Rights Agent (incorporated by reference to Exhibit 10.9 of our Form 10-K for the year ended December 31, 2009)
- 10.10* 2001 Restricted Stock Plan (Incorporated by reference to Exhibit 1 of our Proxy Statement filed on April 16, 2001)
- 10.11* 2005 Equity Incentive Plan (Incorporated by reference to Exhibit 1 of our Proxy Statement filed on April 18, 2005)
- 10.12 Asset Sale Agreement dated as of October 12, 2005, between the Registrant and Uluru, Inc. (Incorporated by reference to Exhibit 10.25 of our 10-K for the year ended December 31, 2005)
- 10.13 Amendment to Asset Sale Agreement dated as of December 8, 2006, between the Registrant and Uluru, Inc. (Incorporated by reference to Exhibit 10.16 of our Form 10-KSB filed on April 2, 2007)
- 10.14 License Agreement dated as of October 12, 2005, between the Registrant and Uluru, Inc. (Incorporated by reference to Exhibit 10.26 of our 10-K for the year ended December 31, 2005)
- 10.15 Form of Warrant dated February 16, 2006, issued by the Registrant to certain Purchasers (Incorporated by reference to Exhibit 10.31 of our Form 10-Q for the quarter ended March 31, 2006)
- 10.16 Form of Warrant dated October 24, 2006, issued by the Registrant to certain Purchasers (Incorporated by reference to Exhibit 10.27 of our Form 10-KSB filed on April 2, 2007)
- 10.17 Form of Warrant December 6, 2006, issued by the Registrant to certain Purchasers (Incorporated by reference to Exhibit 10.32 of our Form 10-KSB filed on April 2, 2007)
- 10.18* 2007 Special Stock Option Plan and Agreement dated January 4, 2007, by and between the Registrant and Stephen R. Seiler, President and Chief Executive Officer (Incorporated by reference to Exhibit 10.35 of our Form 10-QSB filed on May 15, 2007)
- 10.19 Note Purchase Agreement dated April 26, 2007, between the Registrant and Somanta Pharmaceuticals, Inc. (Incorporated by reference to Exhibit 10.42 of our Form 10-Q filed on August 14, 2007)
- 10.20 Preferred Stock and Warrant Purchase Agreement, dated November 7, 2007, between the Registrant and certain Purchasers (Incorporated by reference to Exhibit 10.23 of our Form S-1 filed on March 11, 2008)
- 10.21 Investor Rights Agreement dated November 10, 2007, between the Registrant and certain Purchasers (Incorporated by reference to Exhibit 10.24 of our Form S-1 filed on March 11, 2008)
- 10.22 Form of Warrant Agreement dated November 10, 2007, between the Registrant and certain Purchasers (Incorporated by reference to Exhibit 10.25 of our Form S-1 filed on March 11, 2008)
- 10.23 Board Designation Agreement dated November 15, 2007, between the Registrant and SCO Capital Partners LLC (Incorporated by reference to Exhibit 10.26 of our Form S-1 filed on March 11, 2008)
- 10.24 Amendment and Restated Purchase Agreement, dated February 4, 2008 between the Registrant and certain Purchasers (Incorporated by reference to Exhibit 10.27 of our Form S-1 filed on March 11, 2008)
- 10.25 Amended and Restated Investor Rights Agreement, dated February 4, 2008, between the Registrant and certain Purchasers (Incorporated by reference to Exhibit 10.28 of our Form S-1 filed on March 11, 2008)
- 10.26* Employment Agreement dated January 4, 2008, between the Registrant and Jeffrey B. Davis (Incorporated by reference to Exhibit 10.29 of our Form S-1 filed on March 11, 2008)
- 10.27 Form of Securities Purchase Agreement (Incorporated by reference to Exhibit 10.29 of our Form S-1 filed on January 15, 2010)
- 10.28 Form of Warrant (Incorporated by reference to Exhibit 10.30 of our Form S-1 filed on January 15, 2010)
- 10.29* Employment Agreement of David P. Nowotnik, PhD (Incorporated by reference to Exhibit 10.31 of our Form 8-K February 8, 2010)
- 23.1 Consent of Whitley Penn LLP
- 23.2 Consent of Bingham McCutchen LLP (included in Exhibit 5.1)

* Management contract or compensatory plan required to be filed as an Exhibit to this Form pursuant to Item 15c of the report.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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

Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1/A to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dallas, State of Texas, on this 12th day of April, 2010.

ACCESS PHARMACEUTICALS, INC.

Date April 12, 2010 By: /s/ Jeffrey B. Davis
Jeffrey B. Davis
Chief Executive Officer
(Principal Executive Officer)

Date April 12, 2010 By: /s/ Stephen B. Thompson
Stephen B. Thompson
Vice President, Chief Financial
Officer and Treasurer
(Principal Accounting Officer)

We, the undersigned directors of Access Pharmaceuticals, Inc., hereby severally constitute and appoint Jeffrey B. Davis and Stephen B. Thompson, and both or either one of them, our true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution in for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any subsequent registration statements pursuant to Rule 462 of the Securities Act, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Date April 12, 2010 By: /s/ Jeffrey B. Davis
Jeffrey B. Davis, Director,
Chief Executive Officer

Date April 12, 2010 By: *
Mark J. Ahn, Director

Date April 12, 2010 By: *
Mark J. Alvino, Director

Date April 12, 2010 By: *
Esteban Cvitkovic, Director

Date April 12, 2010 By: *
Stephen B. Howell, Director

Date April 12, 2010 By: *
Steven H. Rouhandeh,
Chairman of the board

Date April 12, 2010 By: /s/ Stephen B. Thompson
Stephen B. Thompson
Attorney-in-fact

* - Executed April 12, 2010 by Stephen B. Thompson as attorney-in-fact under power of attorney granted in Registration Statement previously filed on October 26, 2008.

Exhibit

Number Description of Document

- 2.1 Amended and Restated Agreement of Merger and Plan of Reorganization between the Registrant and Chemex Pharmaceuticals, Inc., dated as of October 31, 1995 (Incorporated by reference to Exhibit A of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 2.2 Agreement and Plan of Merger, by and among the Registrant, Somanta Acquisition Corporation, Somanta Pharmaceuticals, Inc., Somanta Incorporated and Somanta Limited, dated April 19, 2007 (Incorporated by reference to Exhibit 2.1 to our Form 8-K dated April 18, 2007)
- 2.3 Agreement and Plan of Merger, by and among the Registrant, MACM Acquisition Corporation and MacroChem Corporation, dated July 9, 2008 (Incorporated by reference to Exhibit 2.3 of our Form 10-Q for the quarter ended June 30, 2008)
- 3.1 Certificate of Incorporation (Incorporated by reference to Exhibit 3(a) of our Form 8-K dated July 12, 1989, Commission File Number 9-9134)
- 3.2 Certificate of Amendment of Certificate of Incorporation filed August 13, 1992 (Incorporated by reference to Exhibit 3.3 of our Form 10-K for year ended December 31, 1995)
- 3.3 Certificate of Merger filed January 25, 1996 (Incorporated by reference to Exhibit E of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 3.4 Certificate of Amendment of Certificate of Incorporation filed January 25, 1996 (Incorporated by reference to Exhibit E of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 3.5 Certificate of Amendment of Certificate of Incorporation filed July 18, 1996 (Incorporated by reference to Exhibit 3.7 of our Form 10-K for the year ended December 31, 1996)
- 3.6 Certificate of Amendment of Certificate of Incorporation filed June 18, 1998. (Incorporated by reference to Exhibit 3.8 of our Form 10-Q for the quarter ended June 30, 1998)
- 3.7 Certificate of Amendment of Certificate of Incorporation filed July 31, 2000 (Incorporated by reference to Exhibit 3.8 of our Form 10-Q for the quarter ended March 31, 2001)
- 3.8 Certificate of Designations of Series A Junior Participating Preferred Stock filed November 7, 2001 (Incorporated by reference to Exhibit 4.1.H of our Registration Statement on Form S-8 dated December 14, 2001, Commission File No. 333-75136)
- 3.9 Amended and Restated Bylaws (Incorporated by reference to Exhibit 2.1 of our Form 10-Q for the quarter ended June 30, 1996)
- 3.10 Certificate of Designation, Rights and Preferences of Series A Cumulative Convertible Preferred Stock filed November 9, 2007 (Incorporated by reference to Exhibit 3.10 to our Form SB-2 filed on December 10, 2007.
- 3.11 Certificate of Amendment to Certificate of Designations, Rights and Preferences of Series A Cumulative Convertible Preferred Stock filed June 11, 2008 (Incorporated by reference to Exhibit 3.11 of our Form 10-Q for the quarter ended June 30, 2008)
- 5.1 Opinion of Bingham McCutchen LLP (Incorporated by reference to Exhibit 5.1 of our Form S-1/A filed on January 21, 2010)
- 10.1* 1995 Stock Option Plan (Incorporated by reference to Exhibit F of our Registration Statement on Form S-4 dated December 20, 1995, Commission File No. 33-64031)
- 10.2* Amendment to 1995 Stock Option Plan (Incorporated by reference to Exhibit 10.25 of our Form 10-K for the year ended December 31, 2001)
- 10.3 Lease Agreement between Pollock Realty Corporation and the Registrant dated July 25, 1996 (Incorporated by reference to Exhibit 10.19 of our Form 10-Q for the quarter ended September 30, 1996)
- 10.4 Platinate HPMA Copolymer Royalty Agreement between The School of Pharmacy, University of London and the Registrant dated November 19, 1996 (Incorporated by reference to Exhibit 10.9 of our Form 10-K for the year ended December 31, 1996)

- 10.5* 401(k) Plan (Incorporated by reference to Exhibit 10.20 of our Form 10-K for the year ended December 31, 1999)
 - 10.6 Form of Convertible Note (Incorporated by reference to Exhibit 25 of our Form 10-Q for the quarter ended September 30, 2000)
 - 10.7 Rights Agreement dated as of October 31, 2001 between the Registrant and American Stock Transfer & Trust Company, as Rights Agent (Incorporated by reference to Exhibit 99.1 of our Current Report on Form 8-K dated November 7, 2001)
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- 23.1 Consent of Whitley Penn LLP
- 23.2 Consent of Bingham McCutchen (included in Exhibit 5.1)

* Management contract or compensatory plan required to be filed as an Exhibit to this Form pursuant to Item 15c of the report.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 22, 2010, accompanying the consolidated financial statements of Access Pharmaceuticals, Inc. included in the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 23, 2010, which is included in this Registration Statement. We consent to the inclusion in Amendment No. 1 to the Registration Statement of Access Pharmaceuticals, Inc. on Form S-1 of the aforementioned report. We also consent to the reference to our firm under the heading "Experts" in such Registration Statement.

/s/ Whitley Penn LLP

Dallas, Texas
April 12, 2010