SPHERIX INC
Form 10-Q
November 12, 2010
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark one)

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2010

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 0-5576

SPHERIX INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware	**52-0849320**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

6430 Rockledge Drive, Suite 503, Bethesda, MD 20817

(Address of principal executive offices)

301-897-2540

(Registrant s telephone number, including area code)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files.) Yes o No o

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 definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer o	Accelerated Filer o
Non-accelerated Filer o	Smaller Reporting Company x

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

Indicate the number of shares outstanding of each of the Registrant s classes of Common Stock, as of the latest practicable date.

Class	**Outstanding as of November 11, 2010**
Common Stock, $0.005 par value	21,355,872 shares

Form 10-Q

For the Quarter Ended September 30, 2010

Table of Contents

Spherix Incorporated

Index

Table of Contents

Spherix Incorporated

Part I. Financial Information

Item 1. Financial Statements

Consolidated Statements of Operations

(Unaudited)

	Three Months Ended Sept. 30,		Nine Months Ended Sept. 30,	
	2010	**2009**	**2010**	**2009**
Revenue	$ 368,838	$ 378,365	$ 1,028,268	$ 1,071,276
Operating expense				
Direct costs	(121,841)	(125,653)	(353,740)	(365,318)
Research and development expense	(1,453,987)	(1,435,282)	(4,310,471)	(4,130,633)
Selling, general and administrative expense	(933,507)	(974,972)	(3,214,257)	(2,383,338)
Total operating expense	(2,509,335)	(2,535,907)	(7,878,468)	(6,879,289)
Loss from operations	(2,140,497)	(2,157,542)	(6,850,200)	(5,808,013)
Interest income	1,054	5,386	5,270	35,233
Loss before taxes	(2,139,443)	(2,152,156)	(6,844,930)	(5,772,780)
Income tax expense				
Net loss	$ (2,139,443)	$ (2,152,156)	$ (6,844,930)	$ (5,772,780)
Net loss per share, basic	(0.12)	(0.15)	(0.40)	(0.40)
Net loss per share, diluted	(0.12)	(0.15)	(0.40)	(0.40)
Weighted average shares outstanding, basic	17,150,648	14,385,810	17,150,648	14,371,452
Weighted average shares outstanding, diluted	17,150,648	14,385,810	17,150,648	14,371,452

See accompanying notes to financial statements.

Table of Contents

Spherix Incorporated

Consolidated Balance Sheets

	Sept. 30, 2010 (Unaudited)	December 31, 2009
ASSETS		
Current assets		
Cash and cash equivalents	$ 2,866,832	$ 9,026,002
Short-term investments, held to maturity		375,003
Trade accounts receivable, net	349,201	274,153
Other receivables	34,837	948
Prepaid expenses and other assets	43,854	209,255
Total current assets	3,294,724	9,885,361
Property and equipment, net of accumulated depreciation of $180,165 and $126,174	171,967	225,958
Patents, net of accumulated amortization of $49,208 and $44,657	3,813	8,364
Deposits	35,625	35,625
Total assets	$ 3,506,129	$ 10,155,308
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 1,659,310	$ 1,714,140
Accrued salaries and benefits	488,964	388,665
Deferred revenue	255,413	90,915
Total current liabilities	2,403,687	2,193,720
Deferred compensation	550,000	580,000
Deferred rent	88,412	109,712
Total liabilities	3,042,099	2,883,432
Commitments and contingencies		
Stockholders equity		
Preferred stock, $0.01 par value, 2,000,000 shares authorized; none issued and outstanding		
Common stock, $0.005 par value, 50,000,000 shares authorized; 17,237,110 and 17,231,086 issued, and 17,156,672 and 17,150,648 shares outstanding at September 30, 2010 and December 31, 2009	86,185	86,155
Paid-in capital in excess of par value	33,636,564	33,599,510
Treasury stock, 80,438 shares, at cost at September 30, 2010 and December 31, 2009	(464,786)	(464,786)
Accumulated deficit	(32,793,933)	(25,949,003)
Total stockholders equity	464,030	7,271,876
Total liabilities and stockholders equity	$ 3,506,129	$ 10,155,308

See accompanying notes to financial statements.

Table of Contents

Spherix Incorporated

Consolidated Statements of Cash Flows

(Unaudited)

	Nine Months Ended Sept. 30,	
	2010	**2009**
Cash flows from operating activities		
Net loss	$ (6,844,930)	$ (5,772,780)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	58,542	64,863
Loss on disposal of assets		5,399
Bad debt expense	40,000	
Stock-based compensation	37,084	71,548
Changes in assets and liabilities:		
Accounts receivable	(115,048)	(203,507)
Other receivables	(33,889)	35,688
Prepaid expenses and other assets	165,401	275,994
Accounts payable and accrued expenses	45,469	503,872
Deferred rent	(21,300)	(20,658)
Deferred compensation	(30,000)	(60,000)
Deferred revenue	164,498	77,004
Net cash used in operating activities	(6,534,173)	(5,022,577)
Cash flow from investing activities		
Proceeds from the maturity of short-term investments	375,003	909,432
Proceeds from the sale of fixed assets		700
Net cash provided by investing activities	375,003	910,132
Net decrease in cash and cash equivalents	(6,159,170)	(4,112,445)
Cash and cash equivalents, beginning of period	9,026,002	9,404,843
Cash and cash equivalents, end of period	$ 2,866,832	$ 5,292,398

See accompanying notes to financial statements.

Table of Contents

Spherix Incorporated

Notes to the Consolidated Financial Statements

(Unaudited)

1. Basis of Presentation

The accompanying condensed consolidated financial statements of the Company are unaudited and do not include all of the information and disclosures generally required for annual financial statements. In the opinion of management, the statements contain all material adjustments (consisting of normal recurring accruals) necessary to present fairly the Company s financial position as of September 30, 2010, the results of its operations for the three-month and nine-month periods ended September 30, 2010 and 2009, and its cash flows for the nine-month periods ended September 30, 2010 and 2009. This report should be read in conjunction with the Company s Annual Report on Form 10-K, which does contain the complete information and disclosure, for the year ended December 31, 2009.

The Company operates via two principal segments, Biospherics and Health Sciences. Biospherics seeks to develop proprietary products for commercial application. Health Sciences provides technical and regulatory consulting services to biotechnology and pharmaceutical companies, as well as providing technical support for the Biospherics segment.

The Company has created two wholly-owned subsidiaries, Biospherics Incorporated and Spherix Consulting, Inc., for its two operating segments. The Company s Health Sciences contracts are in the name of Spherix Consulting, Inc. and the Company s patents are in the name of Biospherics Incorporated. The Company provides management, strategic guidance, business development, marketing and other services to its subsidiaries.

2. Liquidity and Capital Resources

During 2009 and 2010 the Company has incurred substantial costs in the development of D-tagatose as a treatment for Type 2 diabetes, including a recently completed Phase 3 clinical trial and a related Phase 2 Dose Range trial. We have funded these costs from the cash we received in the 2007 sale of InfoSpherix and the net proceeds of our November 2009 registered direct equity offering.

In October 2010, we obtained net proceeds of approximately $4.9 million in a separate registered offering. The common stock which may be issued upon the conversion of the Series B convertible preferred stock and the exercise of warrants issued in the offering have been registered under a Form S-1 registration statement declared effective by the Securities and Exchange Commission (SEC) in October 2010.

We expect to continue to incur substantial development costs in our Biospherics segment in the next several years, without substantial corresponding revenue. We intend to finance our development activities through the remaining proceeds of the November 2009 registered direct equity offering and the October 2010 registered direct equity offering, as well as additional funds we will seek to raise through the sale of additional stock in the future.

The Company expects that it will need to expend approximately $6 million over the next 12 months to support its currently planned development operations. This estimate assumes (i) continuing efforts to sell, license, or obtain a partner for the diabetes drug application, (ii) no further significant expenditures for developing D-tagatose as a drug for Type 2 diabetes, (iii) continuing development of D-tagatose as a treatment for high triglycerides, (iv) ongoing operation of the Health Sciences segment at the current level of activity and (v) that the Company raises additional funds to continue its development efforts beyond this 12 month period.

Due to the nature of our business, we will need to raise additional funds on a consistent basis to continue operations and to fully pursue the triglycerides opportunity. Fundraising will likely require the issuance of additional Company equity securities and a purchaser of such securities will likely insist that such securities be registered securities.

Further, NASDAQ rules require stockholder approval for certain stock issuances constituting 20% or more of a Company s issued and outstanding stock. We currently have stockholder approval to conduct an additional offering before the end of November 2010; any 20% or greater offering thereafter would require further stockholder approval.

Table of Contents

3. Concentrations of Credit Risk

The Company maintains cash balances at several banks. Accounts at each institution are insured by the Federal Deposit Insurance Corporation up to $250,000. At September 30, 2010, the Company s cash and cash equivalents in excess of the FDIC limits were $2.6 million. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant risks.

4. Use of Estimates and Assumptions

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP). This requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Accordingly, actual results could differ from those estimates and assumptions.

5. New Accounting Pronouncements

In January 2010, new disclosures became effective relating to fair value measurements. These enhanced disclosures have been fully adopted by the Company and are reflected in Note 6 Short-term Investments and Note 7 Fair Value Measurements. The adoption of these disclosure rules had no effect on the Company s financial position, results of operations or cash flows.

In October 2009, the Financial Accounting Standards Board (FASB) issued ASC Update No. 2009-13, which amends the Revenue Recognition topic of the Codification. This update provides amendments to the criteria in Subtopic 605-25 of the Codification for separating consideration in multiple-deliverable arrangements. As a result of those amendments, multiple-deliverable arrangements will be separated in more circumstances than under existing U.S. GAAP. The amendments establish a selling price hierarchy for determining the selling price of a deliverable and will replace the term fair value in the revenue allocation guidance with selling price to clarify that the allocation of revenue is based on entity-specific assumptions rather than assumptions of a marketplace participant. The amendments will also eliminate the residual method of allocation and require that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method and will require that a vendor determine its best estimate of selling price in a manner that is consistent with that used to determine the price to sell the deliverable on a stand-alone basis. These amendments will be effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, with early adoption permitted. We are currently evaluating the impact the adoption of this update might have on our results of operations and financial position.

6. Short-term Investments

The Company s short-term investments consisted of investments in debt securities held to maturity, which matured in one year or less, and were valued at amortized cost, which approximated fair value.

7. Fair Value Measurements

The Company has elected not to apply the fair value option to measure any of the financial assets and liabilities on its balance sheet not already valued at fair value under other accounting pronouncements. These other financial assets and liabilities are primarily short-term investments, accounts receivable, and accounts payable, which are reported at historical value. The fair value of these financial assets and liabilities approximates their fair value because of their short duration. As of September 30, 2010, the Company uses only Level 1 observable inputs such as quoted market prices in active markets for identical assets related to the short-term investments. There were no transfers between Level 1 and Level 2 investments during the quarter or nine-month period ended September 30, 2010.

8. Net Loss Per Share

Basic net loss per common share has been computed by dividing net loss by the weighted-average number of common shares outstanding during the year. Diluted net loss per common share has been computed by dividing net loss by the weighted-average number of common shares outstanding without an assumed increase in common shares

Table of Contents

outstanding for common stock equivalents, as all common stock equivalents are antidilutive because of the loss position. At September 30, 2010, 16,140 of the Company s 63,088 outstanding options and 1,187,174 outstanding warrants were considered common stock equivalents as the exercise prices of these options were below the average market price of the Company s common stock for the period. At December 31, 2009, none of the Company s 40,500 outstanding options or 1,187,174 warrants were considered common stock equivalents as the exercise prices were all above the average market price of the Company s common stock for the period.

9. Accounting for Stock-Based Compensation

For the three- and nine-months ended September 30, 2010, the Company recognized $0 and $30,000 in stock-based compensation expense relating to 35,088 and 28,000 stock options awarded in May 2010 and February 2006, compared to $3,000 and $10,000 for the three- and nine-months ended September 30, 2009, respectively. As of September 30, 2010, there were no unvested options to purchase common stock under the plans.

For the three- and nine-months ended September 30, 2010, the Company recognized $2,000 and $7,000 in stock-based compensation expense relating to 38,640 and 30,000 shares in restricted stock the Company granted in 2009 and 2007, compared to $12,000 and $61,000 for the three- and nine-months ended September 30, 2009, respectively.

A summary of option activity under the Company s stock option plan for the nine months ended September 30, 2010, is presented below:

Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2009	40,500	$ 2.57		
Granted	35,088	$ 1.14		
Exercised				
Expired or forfeited	12,500	$ 3.41		
Outstanding at September 30, 2010	63,088	$ 1.61	2.8	$ 14,035
Exercisable at September 30, 2010	63,088	$ 1.61	2.8	$ 14,035

10. Income Taxes

Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year end, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is established based upon periodic assessments made by management to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the current tax provision for the period and the change during the period in deferred tax assets and liabilities. The Company did not recognize a U.S. Federal income tax provision for the first nine months of 2010 or 2009 as the estimated annual effective tax rate was zero. As of September 30, 2010, the Company continues to provide

a valuation allowance against its net deferred tax assets since the Company believes it is more likely than not its deferred tax assets will not be realized.

Table of Contents

11. Commitments and Contingencies

We have agreed to pay our officers one year salary and health and welfare (COBRA) benefits upon termination of their employment by us or following a change of control.

12. Information by Business Segment

Operating segments are components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company operates via two principal segments, Biospherics and Health Sciences. Biospherics seeks to develop proprietary products for commercial application. Health Sciences provides technical and regulatory consulting services to biotechnology and pharmaceutical companies, as well as aiding the Biospherics segment.

Financial information by business segment for the three and nine months ended September 30, 2010 and 2009 is summarized below:

	Three Months Ended Sept. 30, 2010	2009	Nine Months Ended Sept. 30, 2010	2009
Revenue				
Biospherics	$	$	$	$
Health Sciences	369,000	378,000	1,028,000	1,071,000
Total revenue	$ 369,000	$ 378,000	$ 1,028,000	$ 1,071,000
Operating (Loss) Income and Loss Before Income Taxes				
Biospherics	$ (1,605,000)	$ (1,686,000)	$ (5,079,000)	$ (4,513,000)
Health Sciences	160,000	205,000	314,000	553,000
General	(695,000)	(676,000)	(2,085,000)	(1,848,000)
Total operating loss	(2,140,000)	(2,157,000)	(6,850,000)	(5,808,000)
Interest income	1,000	5,000	5,000	35,000
Other expenses				
Loss from operations before income taxes	$ (2,139,000)	$ (2,152,000)	$ (6,845,000)	$ (5,773,000)

	Sept. 30, 2010	Dec. 31, 2009
Identifiable Assets		
Biospherics	$ 4,000	$ 8,000
Health Sciences	377,000	274,000
General corporate assets	3,125,000	9,873,000
Total assets	$ 3,506,000	$ 10,155,000

13. Subsequent Events

The Company evaluated all events or transactions after September 30, 2010 through the date the financial statements were issued.

In October 2010, the Company obtained net proceeds of approximately $4.9 million in a registered offering. The common stock which may be issued upon the conversion of the Series B convertible preferred stock and the exercise of warrants issued in the offering have been registered under a Form S-1 registration statement declared effective by the SEC in October 2010.

At September 30, 2010, the Company s stockholders equity was $0.5 million, dropping below the $2.5 million minimum required for continued listing on the NASDAQ Capital Market. The Company has subsequently regained compliance with the minimum shareholder equity requirement through the October 2010 registered direct offering, which provided $4.9 million of net proceeds and a corresponding increase in stockholders equity by the same amount.

Table of Contents

In November 2010, the Company was awarded $469,000 in grants from the U.S. Government under the Patient Protection and Affordable Care Act in connection with its Biospherics research activities. The Company expects to receive the proceeds from such grants in November 2010.

Item 2. Management s Discussion and Analysis of Financial Condition and Results of Operations

The following is intended to update the information contained in the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and presumes that readers have access to, and will have read, Management s Discussion and Analysis of Financial Condition and Results of Operations contained in such Form 10-K.

Certain statements in this Quarterly Report on Form 10-Q may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are identified by the use of forward-looking words or phrases such as believes, expects, is or are expected, anticipates, anticipated, should and words of similar impact. These forward-looking statements are based on the Company s current expectations. Because forward-looking statements involve risks and uncertainties, the Company s actual results could differ materially. See the Company s Form 8-K filing dated October 10, 2007, for a more detailed statement concerning forward-looking statements.

Overview

The Company operates via two segments, Biospherics and Health Sciences. Biospherics seeks to develop proprietary products for commercial application. Health Sciences provides technical and regulatory consulting services to food, consumer products, biotechnology and pharmaceutical companies, as well as providing technical support to the Biospherics segment.

Biospherics is dedicated to development of D-tagatose. Until June 2010, this development was limited to developing D-tagatose as a novel, first-in-class treatment for Type 2 diabetes. In June 2010, the Company announced that it will actively seek a pharma partner to continue the diabetes development and that it will also explore D-tagatose as a potential treatment for high triglycerides, a risk factor for atherosclerosis, myocardial infarction, and stroke.

Tagatose, a naturally occurring sugar, is a low-calorie, full-bulk sweetener previously approved by the Food and Drug Administration (FDA) as a GRAS (Generally Recognized As Safe) food ingredient. It is a true sugar that looks, feels, and tastes like table sugar. During human safety studies supporting food use, we discovered and patented a number of health and medical uses for D-tagatose. We hold the patents for use of D-tagatose as a treatment for Type 2 diabetes and the license for the pending PCT (Patent Cooperation Treaty) patents for D-tagatose in new formulations as a treatment for high blood triglycerides. The use patents for D-tagatose as a treatment for Type 2 diabetes expire in 2012, not including extensions. If approved for use as a drug by the FDA as a treatment for Type 2 diabetes, we believe we will be eligible for a five-year New Chemical Entity (NCE) exclusivity period following FDA approval. Similar legislation in Europe could provide seven years of market exclusivity in the European Union, if approved by the European Medicines Agency (EMA). If patents are awarded for the drugs for treatment of hypertriglyceridemia, twenty years of market exclusivity would be obtained in the USA. Exclusivity in other countries could also be obtained by filing individual applications in countries covered by the PCT.

Diabetes

The Company recently completed a Phase 3 trial to determine efficacy of D-tagatose as a treatment for Type 2 diabetes and is currently conducting a Phase 2 Dose Range trial to evaluate the effectiveness of lower doses of D-tagatose in treating Type 2 diabetes.

The Phase 3 study of D-tagatose as a monotherapy in Type 2 diabetes showed a statistically significant ($p<0.05$) reduction in HbA1c levels of 0.4% at 10 months in relatively healthy people with diabetes. The reduction was even more pronounced among the per protocol patients treated in the U.S., and the reduction in HbA1c generally increased over the 10 months patients were treated. The per protocol patients in the U.S. who were treated with D-tagatose had a reduction in HbA1c of 0.4% at two months, 0.6% at six months and 1.1% at 10 months on therapy ($p<0.05$).

Table of Contents

Reduction in HbA1c Over Time

Patient population	2 months	6 months	10 months
U.S. PP	-0.4* (n=51)	-0.6* (n=29)	-1.1* (n=20)
U.S. ITT LOCF	-0.3* (n=100)	-0.3* (n=101)	-0.4* (n=101)
India PP	-0.1 (n=150)	0.0 (n=117)	-0.2 (n=72)
India ITT LOCF	-0.2 (n=253)	-0.1 (n=254)	-0.2* (n=254)
Global PP	-0.2 (n=201)	-0.2* (n=146)	-0.4* (n=92)
Global ITT LOCF	-0.2* (n=353)	-0.2* (n=355)	-0.2* (n=355)
Global ITT (7.5<HbA1c<9.0)	-0.3 (n=175)	0.1 (n=134)	-0.5* (n=92)

The Company intends to submit a detailed analysis of the Phase 3 data to a peer-reviewed medical journal after the complete study report is received later this year. Results of the study will also be posted to ClinicalTrials.gov.

In addition, preliminary data from the Phase 2 Dose Range study demonstrates reductions of HbA1c levels at doses lower than those used in the Phase 3 trial. The Phase 2 Dose Range study is scheduled to be completed by the end of 2010.

Notwithstanding the statistically significant results of the clinical trials, the cost burden of developing drugs specifically for diabetes has increased significantly within the last few years under evolving and more stringent FDA guidelines. A company-commissioned analysis estimates it would take several additional years of clinical trials and could cost as much as several hundred million dollars to achieve a New Drug Application (NDA) filing for D-tagatose under current FDA guidelines. European regulatory requirements are significantly lower and we believe Europe represents a better opportunity for development, especially given the longer exclusivity period granted to a new chemical entity. We have determined that continued development of D-tagatose as a treatment for Type 2 diabetes requires the involvement of a pharma partner with the resources needed to fund the rest of the development and to bring it to market. Accordingly, we are actively seeking a strategic relationship with a pharma company for the continued development of D-tagatose as a treatment for Type 2 diabetes, but there is no assurance that we would obtain such a strategic relationship.

Triglycerides

Interim results of our Phase 2 Dose Range Study demonstrate a substantial reduction in triglycerides from patients who received 7.5 grams of D-tagatose compared to patients who received 2.5 grams of D-tagatose. High triglyceride levels are sometimes a symptom of conditions associated with heart disease such as obesity and metabolic syndrome, which is a condition associated with elevated glucose levels as well as excess fat around the waist, high blood pressure, high triglycerides and low HDL cholesterol.

The Phase 3 clinical trial of D-tagatose was not powered for a triglycerides primary endpoint. Triglyceride measurements were secondary endpoints of our Phase 3 diabetes trial, however, because of the small number of patients enrolled in the NEET diabetes trial with triglyceride levels of 200 to 500 mg/dl, and a lack of patients with triglyceride levels above 500 mg/dl, it was not possible to conduct statistical analyses on secondary endpoints in the Phase 3 trial. Previous research in an animal model of dietary-induced hyperlipidemia demonstrated an effect of D-tagatose on triglycerides, VLDL, LDL in blood, and on atherosclerosis in arterial walls. Animals consuming D-tagatose exhibited a statistically significant five- to six-fold reduction in triglycerides compared with animals consuming sucrose.

The program to investigate D-tagatose as a pharmaceutical agent to lower serum triglycerides will begin in the fourth quarter of this year. As per a normal pharmaceutical development plan, initial studies may include appropriate animal models in order to fully explore the mechanism of action on lipid metabolism, including triglycerides as well as LDL and HDL cholesterol. The commercial intent of the triglyceride program is to develop a formulation, dose and dosing regimen appropriate for the lipid market segment and uniquely different from the diabetes market. Thus, Spherix s intent is to develop a completely new, second brand for triglycerides, separate from the diabetes brand. Our goal is to produce a robust proof of concept in a Phase 2 clinical study, and then seek a pharma partner for further development of the triglycerides drug product. We estimate that it will likely take up to three years to complete the

Table of Contents

studies/trials necessary to attract a pharma partner to complete the development and an additional 2-3 years to complete all necessary studies for an NDA filing.

We expect to incur substantial development costs in our Biospherics segment in the next several years, without substantial corresponding revenue. We intend to finance our development activities through the remaining proceeds received from the 2007 sale of InfoSpherix, the net proceeds of the November 2009 and October 2010 registered direct equity offerings and additional funds we will seek to raise through the sale of additional stock in the future.

Results of Operations for the Three and Nine Months Ended September 30, 2010 and 2009

Revenue and Direct Costs

Revenue and direct costs for the three and nine months ended September 30, 2010 were consistent between years and are solely attributable to the Company s Health Sciences segment.

No substantial revenue is expected from the Biospherics segment until the Company is successful in selling or licensing its technology.

Research and Development

Research and development expenditures relate solely to the Biospherics segment and consist primarily of salaries and related personnel costs, fees paid to consultants and outside service providers, and other expenses related to our efforts to develop D-tagatose for future commercialization. We expense our research and development costs as they are incurred.

The clinical trials in the use of D-tagatose for the treatment of Type 2 diabetes have been the primary focus of the Biospherics segment. The R&D expenditures for 2010 and 2009 consisted of both the Phase 3 clinical trial and a related Phase 2 Dose Range study, and were consistent between years.

The Phase 3 trial to determine efficacy of D-tagatose as a treatment for Type 2 diabetes was recently completed and the Phase 2 Dose Range trial to evaluate the effectiveness of lower doses of D-tagatose in treating Type 2 diabetes is expected to be completed by year-end. As we have determined that it would take several additional years of clinical trials and could cost as much as several hundred million dollars to seek and obtain FDA approval for D-tagatose as a diabetes drug, the safety portion of the Phase 3 trial has been terminated. We are actively seeking a pharma partner to continue the development of D-tagatose as a treatment for Type 2 diabetes, but there is no assurance that we would obtain such a strategic relationship.

Beginning in the fourth quarter of 2010, the Company will shift its R&D focus to the use of D-tagatose in lowering triglyceride levels and anticipates a decrease in R&D costs in the initial years of the triglyceride studies. Pre-clinical trials for the use of D-tagatose in lowering triglyceride levels will begin during the fourth quarter of 2010, with human trials to start later in 2011. We estimate that it will likely take up to three years to complete the studies/trials necessary to attract a pharma partner to complete the development and an additional 2-3 years to complete all necessary studies for an NDA filing.

Selling, General and Administrative

Our selling, general and administrative (S,G&A) expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, professional fees and other corporate expenses, including facilities-related expenses. S,G&A expenses for the nine months ended September 30, 2010 increased $830,000 (35%) over those of the prior year and were consistent between the three months ended September 30, 2010 and 2009. The increase in the nine month S,G&A costs between 2010 and 2009 was primarily attributable to the expansion of the Company s commercialization efforts of D-tagatose as a treatment for Type 2 diabetes and high-triglycerides.

Table of Contents

Interest

Interest revenue in 2010 and 2009 was primarily derived from interest earned on the net proceeds of the sale of the InfoSpherix subsidiary in August 2007 and from the net proceeds of our November 2009 equity offering. The decrease in interest revenue between years is attributable to the decrease in funds available for investing.

Liquidity and Capital Resources, Consolidated

During 2009 and 2010 the Company has incurred substantial costs in the development of D-tagatose as a treatment for Type 2 diabetes, including a recently completed Phase 3 clinical trial and a related Phase 2 Dose Range trial. We have funded these costs from the cash we received in the 2007 sale of InfoSpherix and the net proceeds of our November 2009 registered direct equity offering.

In October 2010, we obtained net proceeds of approximately $4.9 million in a separate registered offering. The common stock which may be issued upon the conversion of the Series B convertible preferred stock and the exercise of warrants issued in the offering have been registered under a Form S-1 registration statement declared effective by the SEC in October 2010.

We expect to continue to incur substantial development costs in our Biospherics segment in the next several years, without substantial corresponding revenue. We intend to finance our development activities through the remaining proceeds of the November 2009 registered direct equity offering and the October 2010 registered direct equity offering, as well as additional funds we will seek to raise through the sale of additional stock in the future.

The Company expects that it will need to expend approximately $6 million over the next 12 months to support its currently planned development operations. This estimate assumes (i) continuing efforts to sell, license, or obtain a partner for the diabetes drug application, (ii) no further significant expenditures for developing D-tagatose as a drug for Type 2 diabetes, (iii) continuing development of D-tagatose as a treatment for high triglycerides, (iv) ongoing operation of the Health Sciences segment at the current level of activity and (v) that the Company raises additional funds to continue its development efforts beyond this 12 month period.

Due to the nature of our business, we will need to raise additional funds on a consistent basis to continue operations and to fully pursue the triglycerides opportunity. Fundraising will likely require the issuance of additional Company equity securities and a purchaser of such securities will likely insist that such securities be registered securities.

Further, NASDAQ rules require stockholder approval for certain stock issuances constituting 20% or more of a Company s issued and outstanding stock. We currently have stockholder approval to conduct an additional offering before the end of November 2010; any 20% or greater offering thereafter would require further stockholder approval.

Item 4T. Controls and Procedures

Inherent Limitations on the Effectiveness of Controls

Management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls and procedures will prevent all errors and fraud. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. Further, the design of a control system must reflect the fact that there are resource constraints, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management s override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of

Table of Contents

changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports, such as this report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the SEC s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. These controls and procedures are based closely on the definition of disclosure controls and procedures in Rule 13a-15(e) promulgated under the Exchange Act. Rules adopted by the SEC require that we present the conclusions of the Chief Executive Officer and Chief Financial Officer about the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report.

The Company carried out an evaluation, under the supervision and with the participation of the Company s management, including the Company s Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company s disclosure controls and procedures to provide reasonable assurance of achieving their objective pursuant to Exchange Act Rule 13a-14. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company s disclosure controls and procedures are effective at a reasonable assurance level, as of September 30, 2010.

Internal Controls

There were no changes in the Company s internal control over financial reporting during the period covered by this quarterly report that have materially affected, or are reasonably likely to materially affect, the Company s internal control over financial reporting.

Part II. Other Information

Item 1A. Risk Factors

An investment in our securities involves a high degree of risk and should be considered only by those persons who are able to afford a loss of their entire investment. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by any forward-looking statement. In particular, you should consider the numerous risks outlined below. Those risk factors are not exhaustive.

RISKS ASSOCIATED WITH PRODUCT DEVELOPMENT

WE MAY NOT BE ABLE TO FIND A STRATEGIC PARTNER FOR OUR DIABETES DRUG CANDIDATE. With the conclusion of the Phase 3 trial, we have scaled back our development of D-tagatose as a treatment for Type 2 diabetes and are actively seeking a strategic partner to continue this development. We may not locate such a partner or may not negotiate an appropriate strategic relationship agreement. If we are not successful, we will not obtain any benefits from the substantial investment we have made in these efforts over the past several years.

OUR POTENTIAL TRIGLYCERIDES DRUG IS AT A VERY EARLY STAGE OF DEVELOPMENT. We will be starting at the beginning in our development of a triglycerides drug. We may begin with animal studies and then progress to human studies and trials. We expect that it could take up to three years to complete the studies/trials necessary to attract a pharma partner to complete the development and an additional 2-3 years to complete all necessary studies for an NDA filing. There can be no assurance that any of these studies/trials will be successful or that we will develop the necessary proof of concept required to attract a pharma partner.

IF WE ARE UNABLE TO COMPLETE OUR TRIGLYCERIDES CLINICAL TRIAL PROGRAMS SUCCESSFULLY, OR IF SUCH CLINICAL TRIALS TAKE LONGER TO COMPLETE THAN WE PROJECT, OUR ABILITY TO EXECUTE OUR CURRENT BUSINESS STRATEGY WILL BE ADVERSELY

Table of Contents

AFFECTED. Whether or not and how quickly we complete triglycerides clinical trials is dependent in part upon the rate at which we are able to engage clinical trial sites and, thereafter, the rate of enrollment of patients, and the rate we collect, clean, lock and analyze the clinical trial database. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the study, the existence of competitive clinical trials, and whether existing or new drugs are approved for the indication we are studying. Certain clinical trials are designed to continue until a pre-determined number of events have occurred in the patients enrolled. Trials such as this are subject to delays stemming from patient withdrawal and from lower than expected event rates. They may also incur additional costs if enrollment is increased in order to achieve the desired number of events. If we experience delays in identifying and contracting with sites and/or in patient enrollment in our clinical trial programs, we may incur additional costs and delays in our development programs, and may not be able to complete our clinical trials in a cost-effective or timely manner. In addition, conducting multi-national studies adds another level of complexity and risk. We are subject to events affecting countries outside the United States. Negative or inconclusive results from the clinical trials we conduct or unanticipated adverse medical events could cause us to have to repeat or terminate the clinical trials. We may also opt to change the delivery method, formulation or dosage, which could affect efficacy results for the drug candidate. Accordingly, we may not be able to complete the clinical trials within an acceptable time frame, if at all.

Additionally, we have never filed an NDA or similar application for approval in the United States, or in any country, which may result in a delay in, or the rejection of, our filing of an NDA or similar application. During the drug development process, regulatory agencies will typically ask questions of drug sponsors. While we endeavor to answer all such questions in a timely fashion, or in the NDA filing, some questions may remain unanswered by the time we file our NDA. Unless the FDA opts not to pursue answers to these questions, submission of an NDA may be delayed or rejected.

PRE-CLINICAL TESTING AND CLINICAL DEVELOPMENT ARE LONG, EXPENSIVE AND UNCERTAIN PROCESSES. IF OUR DRUG CANDIDATES DO NOT RECEIVE THE NECESSARY REGULATORY APPROVALS, WE WILL BE UNABLE TO COMMERCIALIZE OUR DRUG CANDIDATES. We have not received, and may never receive, regulatory approval for the commercial sale of any of our drug candidates. We will need to conduct significant additional research and human testing before we can apply for product approval with the FDA or with regulatory authorities of other countries. Pre-clinical testing and clinical development are long, expensive and uncertain processes. Satisfaction of regulatory requirements typically depends on the nature, complexity and novelty of the product. It requires the expenditure of substantial resources. Data obtained from pre-clinical and clinical tests can be interpreted in different ways, which could delay, limit or prevent regulatory approval. The FDA may pose additional questions or request further clinical substantiation. It may take us many years to complete the testing of our drug candidates and failure can occur at any stage of this process. Negative or inconclusive results or medical events during a clinical trial could cause us to delay or terminate our development efforts.

Furthermore, interim results of preclinical or clinical studies do not necessarily predict their final results, and acceptable results in early studies might not be obtained in later studies.

Clinical trials have a high risk of failure. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving what appeared to be promising results in earlier trials. If we experience delays in the testing or approval process or if we need to perform more or larger clinical trials than originally planned, our financial results and the commercial prospects for our drug candidates may be materially impaired. In addition, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval in the United States and abroad. Accordingly, we may encounter unforeseen problems and delays in the approval process. Although we may engage a clinical research organization with experience in conducting regulatory trials, errors in the conduct, monitoring and/or auditing could potentially invalidate the results.

OUR PATENT PROTECTION MAY NOT BE SUFFICIENT TO PROTECT US. Our current use patent for D-tagatose as a treatment for Type 2 diabetes expires in 2012. We are exploring the prospects of extending our exclusivity for D-tagatose for up to an additional five years.

At present we only have rights for patents pending for triglycerides treatment. There can be no assurance these patents will be issued.

Table of Contents

WE DO NOT CURRENTLY HAVE THE RESOURCES TO BECOME A FULL SCALE BIOTECHNOLOGY COMPANY AND WE MAY NOT BE ABLE TO ATTRACT A NECESSARY BUYER/LICENSEE/PARTNER/STRATEGIC PARTNER BEFORE WE EXPEND ALL OF OUR FUNDS. We intend to continue to develop D-tagatose as a viable triglycerides treatment and to continuously seek a sale, license, or partner. Our hope and expectation is that as we proceed with the development, incremental successes may allow us to negotiate a favorable transaction. There can be no assurance, however, that we will have such incremental successes, or even if we achieve them, that we will attract a buyer, licensee or partner. We have limited resources. As of September 30, 2010, the Company had cash and short-term investments of approximately $2.9 million and expects to expend all of this amount within the next six months. We will need to raise additional funds to continue operations and to fully pursue the triglycerides opportunity and we may not be able to do so in a timely fashion.

REGULATORY AUTHORITIES MAY NOT APPROVE OUR PRODUCT EVEN IF IT MEETS SAFETY AND EFFICACY ENDPOINTS IN CLINICAL TRIALS. The FDA and foreign regulatory agencies can delay, limit or deny marketing approval for many reasons, including:

- a product candidate may not be considered safe or effective;
- the manufacturing processes or facilities we have selected may not meet the applicable requirements; and
- changes in approval policies or adoption of new regulations may require additional work on our part.

Any delay in, or failure to receive or maintain, approval for D-tagatose as a treatment for triglycerides could prevent us from ever generating meaningful revenues.

D-tagatose may not be approved even if it achieves endpoints in clinical trials. Regulatory agencies, including the FDA, or their advisors may disagree with our trial design and our interpretations of data from preclinical studies and clinical trials. Regulatory agencies may change requirements for approval even after a clinical trial design has been approved. Regulatory agencies may also approve a product candidate for fewer or more limited indications than requested, or may grant approval subject to the performance of post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of D-tagatose.

OUR FINANCIAL RESOURCES ARE LIMITED AND WE WILL NEED TO RAISE ADDITIONAL CAPITAL IN THE FUTURE TO CONTINUE OUR BUSINESS. WE MAY NOT BE ABLE TO OBTAIN ADDITIONAL FINANCING IF NEEDED. As of September 30, 2010, the Company had cash and short-term investments of approximately $2.9 million and expects to expend all of this amount within the next six months. Our future capital requirements will depend on many factors, including the progress of the clinical trials and commercialization of D-tagatose, as well as general and administrative costs. Over the next 12 months, the Company expects that it will need to expend $6 million to support its development operations. We will need to raise additional funds to continue operations and to fully pursue the triglycerides opportunity. We cannot ensure that additional funding will be available or, if it is available, that it can be obtained on terms and conditions we will deem acceptable. Any additional funding derived from the sale of equity securities is likely to result in significant dilution to our existing stockholders. These matters involve risks and uncertainties that may prevent us from raising additional capital or may cause the terms upon which we raise additional capital, if additional capital is available, to be less favorable to us than would otherwise be the case.

UNSTABLE MARKET CONDITIONS MAY HAVE SERIOUS ADVERSE CONSEQUENCES ON OUR BUSINESS. The recent economic downturn and market instability have made the business climate more volatile and more costly. Our general business strategy may be adversely affected by unpredictable and unstable market conditions, including:

- one or more of our current service providers, manufacturers and other partners may encounter difficulties during challenging economic times, which would directly affect our ability to attain our goals on schedule and on budget;
- demand for our consulting services may decrease resulting in a decrease in revenue;
- our ability to collect on trade receivables may be negatively impacted by slow payments or bad debt;
- our efforts to raise additional capital may be negatively impacted;

Table of Contents

- additional funding may not be available or, if it is available, may not be on terms and conditions we deem acceptable;

- any additional funding derived from the sale of equity securities is likely to result in significant dilution to our existing stockholders; and

- failure to secure the necessary financing in a timely manner and on favorable terms could have a material adverse effect on our business strategy, financial performance, and stock price and could require us to delay or abandon the clinical development plans.

IF CLINICAL TRIALS OF D-TAGATOSE ARE PROLONGED, DELAYED OR SUSPENDED, IT MAY TAKE SIGNIFICANTLY LONGER AND COST SUBSTANTIALLY MORE TO OBTAIN APPROVAL FOR OUR DRUG CANDIDATE AND ACHIEVE PROFITABILITY, IF AT ALL. Each delay makes it more likely that we will need additional financing to complete our clinical trials. We cannot predict whether we will encounter additional problems that will cause us or regulatory authorities to delay or suspend the clinical trial, or delay the analysis of data from the trials. Any of the following could delay the clinical development of our drug candidates:

- ongoing discussions with the FDA regarding the scope or design of our trial;

- delays in receiving, or the inability to obtain, required approvals from reviewing entities at clinical sites selected for participation in our trial;

- a lower than anticipated retention rate of patients in the trial;

- the need to repeat the trial or conduct another trial as a result of inconclusive or negative results or unforeseen complications in testing;

- inadequate supply or deficient quality of materials necessary to conduct our trial;

- serious and unexpected drug-related side effects experienced by participants in our clinical trials;

- the placement by the FDA of a clinical hold on a trial; or

- any restrictions on or post-approval commitments with regard to any regulatory approval we ultimately obtain that render the drug candidate not commercially viable.

WE WILL RELY ON THIRD PARTIES TO CONDUCT PORTIONS OF OUR TRIALS, AND THOSE THIRD PARTIES MAY NOT PERFORM SATISFACTORILY. We will rely on third parties to enroll qualified patients, conduct our trials, provide services in connection with such trials, and coordinate and oversee significant aspects of the trials. Our reliance on these third parties for clinical development activities reduces our control over these activities. Accordingly, these third party contractors may not complete activities on schedule, or may not conduct our trials in accordance with regulatory requirements or the trial design. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be required to replace them or we may be required to provide these services with our own personnel. Although we believe there are a number of third party contractors we could engage to continue these activities, replacing a third party contractor may result in a delay or affect the trial. If this were to occur, our efforts to obtain regulatory approvals for and commercialize our drug candidate may be delayed.

OUR CORPORATE COMPLIANCE EFFORTS CANNOT GUARANTEE THAT WE ARE IN COMPLIANCE WITH ALL POTENTIALLY APPLICABLE REGULATIONS. The development, manufacturing, pricing, sales, and reimbursement of drug products are subject to extensive regulation by federal, state and other authorities within the United States and numerous entities outside of the United States. We are a relatively small company with only 11 employees. We also have significantly fewer employees than many other companies that have a product candidate in clinical development, and we rely heavily on third parties to conduct many important functions. While we believe that our corporate compliance program is sufficient to ensure compliance with applicable regulation, we cannot assure that we are or will be in compliance with all potentially applicable regulations. If we fail to comply with any of these regulations we could be subject to a range of regulatory actions including suspension or termination of clinical trials, the failure to approve our product candidate, restrictions on our products or manufacturing processes, withdrawal of products from the market, significant fines, or other sanctions or litigation.

WE DO NOT HAVE INTERNAL MANUFACTURING CAPABILITIES, AND IF WE FAIL TO DEVELOP AND MAINTAIN SUPPLY RELATIONSHIPS WITH OUTSIDE MANUFACTURERS, WE MAY BE UNABLE TO DEVELOP OR COMMERCIALIZE D-TAGATOSE. Our ability to develop and commercialize D-tagatose will depend in part on our ability to arrange for other parties to manufacture D-tagatose at a competitive cost, in accordance with regulatory requirements and in sufficient quantities for clinical testing and eventual

Table of Contents

commercialization. If we are unable to enter into or maintain commercial-scale manufacturing agreements on acceptable terms, or if we are unable to successfully bridge material from a manufacturer to the material initially used in the trials, the development and commercialization of D-tagatose could be delayed, which would adversely affect our ability to generate revenues and would increase our expenses.

FAILURE TO OBTAIN REGULATORY APPROVAL IN FOREIGN JURISDICTIONS WOULD PREVENT MARKETING OF D-TAGATOSE. We intend to have D-tagatose marketed both inside and outside of the United States. In order to market D-tagatose in the European Union and many other foreign jurisdictions, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. We and our collaborators may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any market. The failure to obtain these approvals could materially adversely affect our business, financial condition and results of operations.

EVEN IF OUR CLINICAL TRIALS ARE SUCCESSFUL, WE MAY NOT HAVE A COMMERCIALLY VIABLE DRUG OR PRODUCT. We have a number of hurdles to overcome to have a commercially viable drug or product even assuming our clinical trials are successful, including:

- We must secure one or more manufacturers for D-tagatose and we must bridge the materials supplied by the current manufacturer(s) to the previously supplied materials to gain FDA approval.

- We must demonstrate that the product will be accepted in the market place. Even if the clinical trial is successful, the market may not accept the drug formulation or dosing, which would be three times a day in powder form for diabetes treatment.

IF PHYSICIANS AND PATIENTS DO NOT ACCEPT D-TAGATOSE, WE MAY NOT BE ABLE TO GENERATE SIGNIFICANT REVENUES FROM PRODUCT SALES. Even if we obtain regulatory approval for D-tagatose, it may not gain market acceptance among physicians, patients and the medical community for a variety of reasons including:

- timing of market introduction of competitive drugs;

- lower demonstrated clinical safety and efficacy compared to other drugs;

- lack of cost-effectiveness;

- lack of availability of reimbursement from managed care plans and other third-party payors;

- inconvenient administration;

- prevalence and severity of adverse side effects;

- drug interactions with other widely prescribed medications;
- potential advantages of alternative treatment methods;
- safety concerns with similar drugs marketed by others;
- the reluctance of the target population to try new therapies and of physicians to prescribe these therapies; and
- ineffective sales, marketing and distribution support.

If D-tagatose fails to achieve market acceptance, we would not be able to generate significant revenue or achieve profitability.

BIOTECHNOLOGY BUSINESS HAS A SUBSTANTIAL RISK OF PRODUCT LIABILITY CLAIMS. THE DEFENSE OF ANY PRODUCT LIABILITY CLAIM BROUGHT AGAINST US WILL DIVERT MANAGEMENT TIME AND REQUIRE SIGNIFICANT EXPENSE. We could be exposed to significant potential product liability risks that are inherent in the development, manufacture, sales and marketing of drugs and related products. Our insurance may not, however, provide adequate coverage against potential liabilities. Furthermore, product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain current

Table of Contents

amounts of insurance coverage or obtain additional or sufficient insurance at a reasonable cost to protect against losses that could have a material adverse effect on us. If a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damage awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to redirect significant financial and managerial resources to such defense, and adverse publicity is likely to result.

WE HAVE SUSTAINED LOSSES IN THE PAST AND WE WILL SUSTAIN LOSSES IN THE FUTURE. We have incurred losses from continuing operations in prior years, including 2009 and 2008. Our net losses from continuing operations before taxes for the years ended December 31, 2009 and 2008 were $9.1 million and $6.2 million, respectively. The Company s cumulative deficit was $32.8 million at September 30, 2010. We expect to incur substantial losses in 2010 and thereafter until we find a purchaser/licensee. The Company s total cash used through the nine months ended September 30, 2010 was $6.2 million. We may not return to profitable operations.

WE MAY NOT BE ABLE TO RETAIN OUR KEY EXECUTIVES AND PERSONNEL. As a small company, our success depends on the services of key employees in executive and other positions. The loss of the services of one or more of such employees could have a material adverse effect on us.

WE FACE INTENSE COMPETITION BY COMPETITORS. Our competitors in the biotechnology products business are numerous. Many of our competitors have significantly greater financial, marketing and distribution resources than we do. Our competitors may succeed in developing or marketing biotechnology products that are more effective than ours.

WE FACE EVOLVING REGULATION OF CORPORATE GOVERNANCE AND PUBLIC DISCLOSURE THAT MAY RESULT IN ADDITIONAL EXPENSES AND CONTINUING UNCERTAINTY. Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and NASDAQ Stock Market LLC rules are creating uncertainty for public companies. We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of these costs. For example, compliance with the internal control requirements of Section 404 of the Sarbanes-Oxley Act has to date required the commitment of significant resources to document and test the adequacy of our internal control over financial reporting. While our assessment, testing and evaluation of the design and operating effectiveness of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2009, our internal control over financial reporting was effective, we can provide no assurance as to conclusions of management or by our independent registered public accounting firm with respect to the effectiveness of our internal control over financial reporting in the future. These new or changed laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest the resources necessary to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, due to ambiguities related to practice or otherwise, regulatory authorities may initiate legal proceedings against us, which could be costly and time-consuming, and our reputation and business may be harmed.

RISKS RELATED TO OWNERSHIP OF OUR COMMON STOCK

THE PRICE OF OUR COMMON STOCK HAS BEEN HIGHLY VOLATILE DUE TO SEVERAL FACTORS THAT WILL CONTINUE TO AFFECT THE PRICE OF OUR STOCK. Our common stock has traded as low as $0.25 and as high as $4.15 between January 1, 2009 and September 30, 2010. Some of the factors leading to this volatility include:

- relatively small amounts of our stock trading on any given day;
- fluctuations in our operating results;
- announcements of technological innovations or new products that we or our competitors make;

Table of Contents

- developments with respect to patents or proprietary rights; and
- recent economic downturn and market instability.

OUR COMMON STOCK WILL BE DELISTED FROM NASDAQ CAPITAL MARKET SYSTEM IF WE FAIL TO COMPLY WITH CONTINUED LISTING STANDARDS. Our common stock is currently traded on the NASDAQ Capital Market under the symbol SPEX. If we fail to meet any of the continued listing standards of the NASDAQ Capital Market, our common stock could be delisted from the NASDAQ Capital Market. These continued listing standards include specifically enumerated criteria, such as:

- a $1.00 minimum closing bid price;
- shareholders equity of at least $2.5 million;
- 500,000 shares of publicly-held common stock with a market value of at least $1 million;
- 300 round-lot stockholders; and
- compliance with NASDAQ s corporate governance requirements, as well as additional or more stringent criteria that may be applied in the exercise of NASDAQ s discretionary authority.

Minimum Bid Price Requirement

On July 21, 2008, NASDAQ notified the Company that its common stock failed to maintain a minimum bid price of $1.00 over the previous 30 consecutive business days as required by the NASDAQ Listing Rules. In October 2008, NASDAQ suspended enforcement of the minimum bid price and market value of publicly held shares requirements through January 16, 2009. On December 19, 2008, NASDAQ extended its suspension of the requirements until April 20, 2009 and on March 24, 2009 NASDAQ again extended the suspension until July 20, 2009. On May 20, 2009, the Company received notification from NASDAQ confirming that it has regained compliance with the minimum bid price requirement for continued listing on NASDAQ under Listing Rule 5550(a)(2). In the letter, NASDAQ stated that this matter is now closed.

On November 17, 2008, the stockholders of Spherix authorized a reverse split of the Company s common stock within a range of 1:5 to 1:20. This authorization was extended on November 17, 2009 for an addition eighteen months. Accordingly, the Board of Directors has the authority, at any time until mid-May 2011, to determine whether and when to implement a reverse stock split and the actual ratio of such a split within the 1:5 to 1:20 range.

Following completion of our October 2010 offering, our stock price has fallen below $1.00 per share. If our stock price does not increase, we will once again face a delisting situation. As a result, we may implement the reverse stock split as described above to attempt to effect an increase in our stock price. There can be no assurance that we will effect such a split or that any such split would be effective in avoiding the stock delisting.

Independent Director Requirement

On April 17, 2009, the Company reported in the Current Report on Form 8-K filed with the Securities and Exchange Commission, that Mr. A. Paul Cox, Jr., one of our independent directors, passed away on April 13, 2009. On April 23, 2009, NASDAQ notified the Company that the Company no longer complied with NASDAQ Listing Rule 5605, which requires that a majority of the board of directors be comprised of independent directors.

On May 18, 2009, the Company received notification from NASDAQ confirming that it had regained compliance with the independent director requirement for continued listing on NASDAQ under Listing Rule 5605(b)(1). NASDAQ s determination was based on the Company s appointment of Thomas B. Peter to the Company s Board of Directors as reported in the Company s Current Report Form 8-K filed on May 14, 2009. In the letter, NASDAQ stated that this matter is now closed.

Minimum Shareholder Equity Requirement

At September 30, 2010, the Company s stockholders equity was $0.5 million, dropping below the $2.5 million minimum required for continued listing on the NASDAQ Capital Market. The Company has subsequently regained compliance with the minimum shareholder equity requirement through the October 2010 registered direct offering, which provided $4.9 million of net proceeds and a corresponding increase in stockholders equity by the same amount.

Table of Contents

In the future, if our common stock were to fail to meet the minimum bid price requirement or any of the other listing requirements it could be delisted from the NASDAQ Capital Market. In that case, trading of our common stock most likely will be conducted in the over-the-counter (OTC) Bulletin Board market, an electronic bulletin board established for unlisted securities. Such delisting could also adversely affect our ability to obtain financing for the continuation of our operations and could result in the loss of confidence by investors, suppliers and employees.

WE COULD FAIL IN FINANCING EFFORTS OR BE DELISTED FROM NASDAQ IF WE FAIL TO RECEIVE SHAREHOLDER APPROVAL WHEN NEEDED. We are required under the NASDAQ Marketplace rules to obtain shareholder approval for any issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding before the issuance of such securities sold at a discount to the greater of book or market value in an offering that is not deemed to be a public offering by NASDAQ. Funding of our operations in the future may require issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding, but we might not be successful in obtaining the required shareholder approval for such an issuance. If we are unable to obtain financing due to shareholder approval difficulties, such failure may have a material adverse effect on our ability to continue operations.

DIVIDENDS ON OUR COMMON STOCK ARE NOT LIKELY. We do not anticipate paying cash dividends on our common stock in the foreseeable future. Investors must look solely to appreciation in the market price of the shares of our common stock to obtain a return on their investment.

BECAUSE OF THE RIGHTS AGREEMENT AND ANTI-TAKEOVER PROVISIONS IN OUR CERTIFICATE OF INCORPORATION AND BYLAWS, A THIRD PARTY MAY BE DISCOURAGED FROM MAKING A TAKEOVER OFFER THAT COULD BE BENEFICIAL TO OUR STOCKHOLDERS. In 2001, we adopted a shareholder rights plan. The effect of this rights plan and of certain provisions of our Certificate of Incorporation, By-Laws, and the anti-takeover provisions of the Delaware General Corporation Law, could delay or prevent a third party from acquiring us or replacing members of our Board of Directors, even if the acquisition or the replacements would be beneficial to our stockholders. These factors could also reduce the price that certain investors might be willing to pay for shares of the common stock and result in the market price being lower than it would be without these provisions.

INSIDERS OWN A SIGNIFICANT PORTION OF OUR COMMON STOCK, WHICH COULD LIMIT OUR STOCKHOLDERS ABILITY TO INFLUENCE THE OUTCOME OF KEY TRANSACTIONS. As of September 30, 2010, our Officers and Directors and their affiliates owned approximately 14.9% of the outstanding shares of our common stock. As a result, our Officers and Directors are able to exert considerable influence over the outcome of any matters submitted to a vote of the holders of our common stock, including the election of our Board of Directors. The voting power of these stockholders could prevent or frustrate attempts to effect a transaction that is in the best interests of the other stockholders and could also discourage others from seeking to purchase our common stock, which might depress the price of our common stock.

Item 6. Exhibits

31.1	Certification of Chief Executive Officer of Spherix Incorporated pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer of Spherix Incorporated pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer of Spherix Incorporated pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

32.2 Certification of Chief Financial Officer of Spherix Incorporated pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Table of Contents

Signatures

Pursuant to the requirements of the Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Spherix Incorporated
(Registrant)

Date:	November 12, 2010	By:	/s/ Claire L. Kruger Claire L. Kruger Chief Executive Officer and Chief Operating Officer
Date:	November 12, 2010	By:	/s/ Robert L. Clayton Robert L. Clayton, CPA Chief Financial Officer and Treasurer