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 March 31, 2011.

[ ] 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 [ ]

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 [ ] No [ ]

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 [ ] Accelerated Filer [ ] Non-accelerated Filer [ ] 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 [ ] 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 May 11, 2011
Common Stock, $0.01 par value	2,562,487

Spherix Incorporated

Form 10-Q
For the Quarter Ended March 31, 2011

Index

Spherix Incorporated

Part I. Financial Information

Item 1. Financial Statements

Consolidated Statements of Operations
(Unaudited)

	Three Months Ended March 31, 2011	Three Months Ended March 31, 2010
Revenue	$ 306,303	$ 332,291
Operating expense		
Direct costs	(130,296)	(119,629)
Research and development expense	(355,503)	(1,311,879)
Selling, general and administrative expense	(932,204)	(1,050,647)
Total operating expense	(1,418,003)	(2,482,155)
Loss from operations	(1,111,700)	(2,149,864)
Interest income	1,219	1,988
Other income	44,630	-
Gain on settlement of obligations	845,000	-
Loss before taxes	(220,851)	(2,147,876)
Income tax expense	(14,485)	-
Net loss	$ (235,336)	$ (2,147,876)
Net loss per share, basic	$ (0.10)	$ (1.25)
Net loss per share, diluted	$ (0.10)	$ (1.25)
Weighted average shares outstanding, basic	2,448,647	1,715,065
Weighted average shares outstanding, diluted	2,448,647	1,715,065

See accompanying notes to financial statements.

Spherix Incorporated

Consolidated Balance Sheets

ASSETS	March 31, 2011 (Unaudited)	December 31, 2010
Current assets		
Cash and cash equivalents	$ 6,544,793	$ 5,575,310
Trade accounts receivable, net of allowance of $0 and $65,000	193,125	285,859
Grants receivable	-	270,128
Other receivables	105,685	74,110
Prepaid research expenses	404,032	464,322
Prepaid expenses and other assets	146,226	155,261
Total current assets	7,393,861	6,824,990
Property and equipment, net of of accumulated depreciation of $215,008 and $197,971	139,498	154,161
Patents, net of accumulated amortization of $1,839 and $50,725	307	2,296
Deposit	35,625	35,625
Total assets	$ 7,569,291	$ 7,017,072
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 395,111	$ 1,211,561
Accrued salaries and benefits	253,712	563,706
Deferred revenue	96,515	170,641
Total current liabilities	745,338	1,945,908
Deferred compensation	-	550,000
Deferred rent	73,478	80,945
Total liabilities	818,816	2,576,853
Commitments and contingencies	-	-
Stockholders' equity		
Preferred stock, $0.01 par value, 2,000,000 shares authorized; 5,250 series B issued and 1 outstanding at March 31, 2011 and December 31, 2010	-	-
Common stock, $0.01 par value, 5,000,000 shares authorized; 2,570,531 and 2,143,631 issued, 2,562,487 and 2,135,587 outstanding at March 31, 2011 and December 31, 2010, respectively	25,705	21,436
Paid-in capital in excess of par value	41,110,137	38,568,814
Treasury stock, 8,043 shares, at cost at March 31, 2011 and December 31, 2010	(464,786)	(464,786)
Accumulated deficit	(33,920,581)	(33,685,245)
Total stockholders' equity	6,750,475	4,440,219
Total liabilities and stockholders' equity	$ 7,569,291	$ 7,017,072

See accompanying notes to financial statements.

Spherix Incorporated

Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31, 2011	2010
Cash flows from operating activities		
Net loss	$ (235,336)	$ (2,147,876)
Adjustments to reconcile net loss to net cash used in operating activities:		
Gain on settlement of obligations	(845,000)	-
Depreciation and amortization	19,026	19,514
Recovery of bad debt	(13,525)	-
Stock-based compensation	-	4,145
Changes in assets and liabilities:		
Receivable	344,812	(33,818)
Prepaid expenses and other assets	69,325	47,636
Accounts payable and accrued expenses	(526,444)	(589,879)
Deferred rent	(7,467)	(6,366)
Deferred compensation	(305,000)	(45,000)
Deferred revenue	(74,126)	(11,311)
Net cash used in operating activities	(1,573,735)	(2,762,955)
Cash flows from investing activities		
Purchase of fixed assets	(2,374)	-
Net cash used in investing activities	(2,374)	-
Cash flows from financing activities		
Proceeds from issuance of common stock, net	2,545,592	-
Net cash provided by financing activities	2,545,592	-
Net increase (decrease) in cash and cash equivalents	969,483	(2,762,955)
Cash and cash equivalents, beginning of period	5,575,310	9,026,002
Cash and cash equivalents, end of period	$ 6,544,793	$ 6,263,047

See accompanying notes to financial statements.

Spherix Incorporated

Notes to the Consolidated Financial Statements
(Unaudited)

1. Basis of Presentation

The accompanying 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 March 31, 2011, the results of its operations for the three-month periods ended March 31, 2011 and 2010, and its cash flows for the three-month periods ended March 31, 2011 and 2010. This report should be read in conjunction with the Company's Annual Report on Form 10-K, which contains information and disclosure for the year ended December 31, 2010.

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 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. Spherix Incorporated provides management, strategic guidance, business development, marketing and other services to its subsidiaries.

On May 6, 2011, the Company effected a one-for-ten reverse split of its common stock. The Company implemented the reverse stock split under the authority granted to the Board of Directors by the Company's stockholders at the annual meeting of stockholders held on November 17, 2009, to affect a reverse stock split of the Company's Common Stock, par value $0.01 per share. The reverse stock split reduced the number of outstanding shares of Common Stock from 25,624,872 shares to 2,562,487 shares. All per share amounts and outstanding shares, including all Common Stock equivalents, stock options, equity compensation plans, and warrants, have been retroactively restated in the Financial Statements and in the Notes to the Financial Statements for all periods presented to reflect the reverse stock split. On the Company's balance sheet, the aggregate par value of the common stock at December 31, 2010 was retroactively reduced by $85,746 with an off-setting increase to paid-in capital in excess of par.

2. Liquidity and Capital Resources

The Company's working capital was $6.6 million as of March 31, 2011, compared to working capital of $4.9 million as of December 31, 2010. The Company has incurred substantial development costs in its efforts to explore whether D-tagatose is an effective 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, October 2010 and January 2011 registered direct equity offerings.

Over the next 12 months, the Company expects that it will need to expend between $3 million and $5 million to support our 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 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 we raise additional funds to continue our development efforts beyond this 12-month period.

In October 2010, we obtained net proceeds of approximately $4.9 million in a separate registered offering. The common stock issued upon the conversion of the Series B convertible preferred stock and common stock, which may be issued upon 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.

In January 2011, the Company obtained net proceeds of approximately $2.5 million in a registered direct primary offering. The common stock issued in the offering and the common stock, which may be issued upon exercise of warrants issued in the offering, have been registered under a Form S-3 registration statement declared effective by the SEC in October 2009.

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 equity securities, and a purchaser of such securities will likely insist that such securities be registered securities. NASDAQ rules require stockholder approval for certain stock issuances constituting twenty percent (20%) or more of a company's issued and outstanding stock.

Pursuant to SEC rules, the Company may not be in a position to issue additional shares of its common stock in another registered direct primary offering under a Form S-3 registration statement until February 2012. Thus, if the Company wishes to conduct another registered direct primary offering before February 2012, it will likely have to do so in whole or in part under a Form S-1 registration statement.

The Company cannot be assured that it will be able to attract a purchaser of securities to raise the additional funds it will likely require, that the Company will be able to obtain any required stockholder approval, or that the Company will be able to have additional registered direct primary offerings. If we reach a point where we are unable to raise needed additional funds to continue our business activities, we will be forced to cease our development activities and dissolve the Company. In such an event, we will need to satisfy various severance, lease termination and other dissolution-related obligations.

3. Common Stock and Paid-in Capital in Excess of Par

During the three months ended March 31, 2011, the Company issued shares of common stock as follows:

	Preferred Stock		Common Stock		Paid-in Capital in
	Shares	Amount	Shares	Amount	Excess of Par
Balance, January 1, 2011	1	$ -	2,143,631	$ 21,436	$ 38,568,814
Sale of common stock, net of offering costs of $229,258 (1)	-	-	426,900	4,269	2,541,323
Balance, March 31, 2011	1	$ -	2,570,531	$ 25,705	$ 41,110,137

(1) The stock issuance is further discussed in Note 2, "Liquidity and Capital Resources"

4. Concentrations of Risk

The Company maintains cash balances at several banks. Interest bearing accounts at each institution are insured by the Federal Deposit Corporation up to $250,000. At March 31, 2011, the Company's cash and cash equivalents in excess of the FDIC limits were $6.3 million. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant risks.

5. 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. 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.

6. New Accounting Pronouncements

In July 2010, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2010-20, an accounting update to provide guidance to enhance disclosures related to the credit quality of a company's financing receivables portfolio and the associated allowance for credit losses. Pursuant to this accounting update, a company is required to provide a greater level of disaggregated information about its allowance for credit loss with the objective of facilitating users' evaluation of the nature of credit risk inherent in the company's portfolio of financing receivables, how that risk is analyzed and assessed in arriving at the allowance for credit losses, and the changes and reasons for those changes in the allowance for credit losses. The revised disclosures as of the end of the reporting period are effective for the Company beginning in 2011. The adoption of these disclosure rules had no effect on the Company's financial position, results of operations or cash flows.

In December 2010, the FASB issued ASU No. 2010-29, "Business combinations – disclosure of supplementary pro forma information," to amend topic ASC 805 "Business Combinations," by improving disclosure requirements related to the business combinations performed during the year being reported on. Under the amended guidance, a public entity that presents comparative financial statements must disclose the pro forma revenue and earnings of the combined entity as though the business combination had occurred as of the beginning of the prior annual reporting period. The adoption of these disclosure rules had no effect on the Company's financial position, results of operations or cash flows.

7. Fair Value Measurement

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 accounts receivable and accounts payable, which are reported at historical value. The fair value of these financial assets and liabilities approximate their fair value because of their short duration.

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 outstanding for common stock equivalents, as common stock equivalents are antidilutive. At March 31, 2011, none of the Company's 3,509 outstanding options and none of the warrants to purchase up to 567,574 shares of common stock were included in the calculation of diluted earnings per share as the exercise prices were all above the average market price of the Company's common stock for the period and thus would be antidilutive. At March 31, 2010, none of the Company's 2,800 outstanding options and none of the warrants to purchase up to 118,717 shares of common stock were included in the calculation of diluted earnings per share as the exercise prices were all above the average market price of the Company's common stock for the period and thus would be antidilutive.

9. Accounting for Stock-Based Compensation

The Company had no stock-based compensation expense during the three months ended March 31, 2011 and had no unrecognized amounts as of that date. For the three months ended March 31, 2010, the Company recognized $2,000 in stock-based compensation expense relating to stock options awarded in February 2006 and $2,000 in stock-based compensation expense relating to restricted stock the Company granted in August 2009.

A summary of option activity under the Company's employee stock option plan for the three months ended March 31, 2011, is presented below:

Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at beginning of year	6,309	$ 16.10		
Granted	-	$ -		
Exercised	-	$ -		
Expired or forfeited	(2,800)	$ 22.00		
Outstanding at end of period	3,509	$ 11.40	4.2	$ -
Exercisable at March 31, 2011	3,509	$ 11.40	4.2	$ -

As of March 31, 2011, there were no unvested options to purchase common stock under the plans.

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's estimated annual effective tax rate was zero for the first three months of 2011 and 2010. However, the effective income tax rate for the quarter ended March 31, 2011 was approximately -6.6% as a result of realizing a discrete item of $15,000, compared to an effective income tax rate of 0.0% for the quarter ended March 31, 2010. As of March 31, 2011, the Company continues to provide a valuation allowance against its net deferred tax assets since the Company believes it is more likely than not that its deferred tax assets will not be realized.

11. 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 months ended March 31, 2011 and 2010 is summarized below:

		Three Months Ended March 31, 2011	Three Months Ended March 31, 2010
Revenue	Biospherics	$ -	$ -
	Health Sciences	306,000	332,000
	Total revenue	$ 306,000	$ 332,000
Operating Profit (Loss) and Loss Before Income Taxes	Biospherics	$ (406,000)	$ (1,575,000)
	Health Sciences	123,000	100,000
	General	(829,000)	(675,000)
	Total operating loss	(1,112,000)	(2,150,000)
	Other income	45,000	-
	Gain of settlement of obligations	845,000	-
	Interest income	1,000	2,000
	Loss from operations before income taxes	$ (221,000)	$ (2,148,000)
		March 31, 2011	**Dec. 31, 2010**
Identifiable Assets	Biospherics	$ 407,000	$ 739,000
	Health Sciences	298,000	359,000
	General corporate assets	6,864,000	5,919,000
	Total assets	$ 7,569,000	$ 7,017,000

12. Settlement of Obligations

Purchase Commitments

On January 14, 2011, Biospherics Incorporated, filed a Complaint For Injunction Relief And Damages in The United States District Court For The District Of Maryland against Inalco S.p.A. (the "Complaint"). The Complaint alleged that one of the Company's D-Tagatose suppliers, Inalco, had breached the 2009 Manufacturing Support and Supply Agreement as Inalco (i) refused to supply D-tagatose previously paid for by Biospherics, (ii) refused to provide a promised bank guarantee, and (iii) shut-down its D-tagatose production facilities. On March 16, 2011, both parties signed a settlement agreement whereby Inalco agreed to supply Spherix with 8.5 metric tons of D-tagatose, which has been received by Spherix, and both parties have agreed to release each other from any other obligations under the previous agreement. As a result, the Company recognized a gain on settlement of obligations of $600,000 in March 2011 on the release from its purchase obligation.

Related Party Transactions

In January 2011, the Company entered into a Letter Agreement with Gilbert V. Levin and M. Karen Levin pursuant to which the Company agreed to make a one time lump sum payment of $450,000 to the Levins in full satisfaction of the Company's obligation to make a series of continuing payments to the Levins relating to their prior employment by the Company. The Company's estimated liability to the Levins prior to the above agreement was approximately $695,000. The $450,000 lump sum payment was made on January 31, 2011, and the Company recognized the $245,000 difference as a gain on settlement of obligations in January 2011.

13. Subsequent Events

On April 19, 2011, the Company announced that its Board of Directors unanimously approved a reverse stock split of the Company's common stock, which became effective as of the close of business on May 6, 2011, at a ratio of one (1) new share for each existing ten (10) shares. As a result the number of outstanding shares of common stock was reduced from 25,624,872 before the reverse stock split to 2,562,487 after the reverse stock split. In November 2009, the Company's shareholders provided the Board of Directors authority to effect this reverse stock split.

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, 2010, 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.

Overview

The Company operates via two segments, Biospherics and Health Sciences. Biospherics seeks to develop proprietary pharmaceutical products. 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 pharmaceuticals. 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.

D-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. 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 or more 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.

Results of Operations for the Three Months Ended March 31, 2011 and 2010

Revenue and Direct Costs

Revenue and direct contract costs for the three months ended March 2011 and 2010 were consistent between years and are directly related 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 was the primary focus of the Biospherics segment during 2010. Beginning in the fourth quarter of 2010, the Company began shifting the focus of its R&D efforts 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 are being conducted in 2011 and a human proof-of-concept trial may begin later in 2012. Spherix has also begun testing SPX10624258 (a new drug for treating dyslipidemia licensed last year from the University of Kentucky Research Foundation) in combination with D-tagatose in animals. Combination therapy is an important tool in many complex disease settings, including cancer, infectious diseases, cardiovascular disease, diabetes and the metabolic syndrome. Scientific progress has increased understanding of the pathophysiological processes that underlie these and other multifactorial diseases. This increased knowledge has advanced new therapeutic approaches using combinations of drugs targeted at multiple therapeutic targets to improve treatment response and/or minimize development of drug resistance. In settings like metabolic syndrome, in which combination therapy may offer significant therapeutic advantages, there is increasing interest in the development of combinations of investigational drugs not previously developed for any purpose.

We estimate that it will likely take 3 or more years to complete the studies/trials necessary to attract a pharma partner to complete the development and an additional 2-4 years to complete all necessary studies for an NDA filing for D-tagatose or SPX10624258.

The Company's R&D expenses in 2011 for pre-clinical triglyceride trials will be substantially less than the diabetes trials incurred in 2010. The R&D expenditures for 2010 consisted of both the Phase 3 clinical trial and a related Phase 2 Dose Range study. For the three-month period ended March 31, 2011, R&D expenses decreased by $1 million between years following the completion of the clinical portions of the Phase 3 and Phase 2 diabetes trials in 2010.

As noted, each of the Phase 3 trial to determine efficacy of D-tagatose as a treatment for Type 2 diabetes and the Phase 2 Dose Range trial to evaluate the effectiveness of lower doses of D-tagatose in treating Type 2 diabetes were completed in late 2010. 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 will obtain such a strategic relationship.

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 three months ended March 31, 2011 decreased $118,000 (11%) from those of the prior year. The decrease between years was primarily attributable to a scaling down of the Company's business development activities.

Other Income

In October 2010, the Company was awarded two one-time grants from the U.S. Government under the Patient Protection and Affordable Care Act. The awards were for the Company's Diabetes and Triglyceride research. As a result, in 2011 the Company recognized $44,630 in other income.

Gain on Settlement of Obligations

In January 2011, the Company entered into a Letter Agreement with Gilbert V. Levin and M. Karen Levin pursuant to which the Company agreed to make a one time lump sum payment of $450,000 to the Levins in full satisfaction of the Company's obligation to make a series of continuing payments to the Levins relating to their prior employment by the Company. Per the terms of the agreement, Gilbert V. Levin resigned as a member of the Board of Directors of the Company on January 13, 2011. The Company's estimated liability to the Levins at December 31, 2010, and prior to the above agreement was approximately $695,000. The $450,000 lump sum payment was made on January 31, 2011, and the Company recognized the $245,000 difference as a gain on settlement of obligations in January 2011.

On January 14, 2011, Biospherics Incorporated, a wholly-owned subsidiary of the Company, filed a Complaint For Injunction Relief And Damages in The United States District Court For The District Of Maryland against Inalco S.p.A. (the "Complaint"). The Complaint alleged that Inalco had breached the 2009 Manufacturing Support and Supply Agreement as Inalco (i) refused to supply D-tagatose previously paid for by Biospherics, (ii) refused to provide a promised bank guarantee, and (iii) shut-down its D-tagatose production facilities. On March 16, 2011, both parties signed a settlement agreement whereby Inalco agreed to supply Spherix with 8.5 metric tons of D-tagatose, which has been received by Spherix, and both parties have agreed to release each other from any other obligations under the previous agreement. As a result, the Company recognized a gain of $600,000 in March 2011 on the release from its purchase obligation.

Interest

Interest revenue in 2011 and 2010 was primarily derived from interest earned on the net proceeds of our equity offerings.

Liquidity and Capital Resources, Consolidated

The Company's working capital was $6.6 million as of March 31, 2011, compared to working capital of $4.9 million as of December 31, 2010. The Company has incurred substantial development costs in its efforts to explore whether D-tagatose is an effective 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, October 2010 and January 2011 registered direct equity offerings.

Over the next 12 months, the Company expects that it will need to expend between $3 million and $5 million to support our 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 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 we raise additional funds to continue our development efforts beyond this 12-month period.

In October 2010, we obtained net proceeds of approximately $4.9 million in a separate registered offering. The common stock issued upon the conversion of the Series B convertible preferred stock and common stock, which may be issued upon 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.

In January 2011, the Company obtained net proceeds of approximately $2.5 million in a registered direct primary offering. The common stock issued in the offering and the common stock, which may be issued upon exercise of warrants issued in the offering, have been registered under a Form S-3 registration statement declared effective by the Securities and Exchange Commission ("SEC") in October 2009.

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 equity securities and a purchaser of such securities will likely insist that such securities be registered securities. NASDAQ rules require stockholder approval for certain stock issuances constituting twenty percent (20%) or more of a company's issued and outstanding stock.

Pursuant to SEC rules, the Company may not be in a position to issue additional shares of its common stock in another registered direct primary offering under a Form S-3 registration statement until February 2012. Thus, if the Company wishes to conduct another registered direct primary offering before February 2012, it will likely have to do so in whole or in part under a Form S-1 registration statement.

The Company cannot be assured that it will be able to attract a purchaser of securities to raise the additional funds it will likely require, that the Company will be able to obtain any required stockholder approval, or that the Company will be able to have additional registered direct primary offerings. If we reach a point where we are unable to raise needed additional funds to continue our business activities, we will be forced to cease our development activities and dissolve the Company. In such an event, we will need to satisfy various severance, lease termination and other dissolution-related obligations.

Item 4. 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 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 March 31, 2011.

Changes in Internal Controls over Financial Reporting

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

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A Risk Factors" in our Form 10-K for the year ending December 31, 2010, which could materially affect our business, financial condition, and results of operations. The risks described in our Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

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

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: May 13, 2011

By: /s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief Operating Officer

Date: May 13, 2011

By: /s/ Robert L. Clayton
Robert L. Clayton, CPA
Chief Financial Officer and Treasurer

Exhibit 31.1

Spherix Incorporated

Certification of
Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Claire L. Kruger, certify that:

1. I have reviewed this report on Form 10-Q of Spherix Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief
Operating Officer
May 13, 2011

Exhibit 31.2

Spherix Incorporated

Certification of
Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Robert L. Clayton, certify that:

1. I have reviewed this report on Form 10-Q of Spherix Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer and Treasurer
May 13, 2011

Exhibit 32.1

Spherix Incorporated

Certification of
Chief Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Claire L. Kruger, Chief Executive Officer and Chief Operating Officer, of Spherix Incorporated (the "Company"), in compliance with Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, to the best of my knowledge, the Company's Report on Form 10-Q for the period ended March 31, 2011 (the "Report") filed with the Securities and Exchange Commission:

- Fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief
Operating Officer
May 13, 2011

A signed copy of this written statement required by Section 906 has been provided to Spherix Incorporated and will be retained by Spherix Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

Spherix Incorporated

Certification of
Chief Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Robert L. Clayton, Chief Financial Officer and Treasurer, of Spherix Incorporated (the "Company"), in compliance with Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, to the best of my knowledge, the Company's Report on Form 10-Q for the period ended March 31, 2011 (the "Report") filed with the Securities and Exchange Commission:

- Fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer and Treasurer
May 13, 2011

A signed copy of this written statement required by Section 906 has been provided to Spherix Incorporated and will be retained by Spherix Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.