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 June 30, 2009

[ ] 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 August 14, 2009
Common Stock, $0.005 par value	14,357,162 shares

Spherix Incorporated

Form 10-Q
For the Quarter Ended June 30, 2009

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Part I. Financial Information

Item 1. Financial Statements

Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2009	2008	2009	2008
Revenue	$ 332,241	$ 263,151	$ 692,911	$ 406,059
Operating expense				
Direct costs	109,123	98,825	239,665	160,419
Research and development expense	1,133,962	709,941	2,695,351	1,741,149
Selling, general and administrative expense	649,096	741,295	1,408,366	1,842,210
Total operating expense	1,892,181	1,550,061	4,343,382	3,743,778
Loss from operations	(1,559,940)	(1,286,910)	(3,650,471)	(3,337,719)
Interest income	5,400	88,637	29,847	225,212
Loss before taxes	(1,554,540)	(1,198,273)	(3,620,624)	(3,112,507)
Income tax expense	-	-	-	-
Net loss	$ (1,554,540)	$ (1,198,273)	$ (3,620,624)	$ (3,112,507)
Net loss per share, basic	$ (0.11)	$ (0.08)	$ (0.25)	$ (0.22)
Net loss per share, diluted	$ (0.11)	$ (0.08)	$ (0.25)	$ (0.22)
Weighted average shares outstanding, basic	14,357,162	14,318,702	14,357,162	14,318,702
Weighted average shares outstanding, diluted	14,357,162	14,318,702	14,357,162	14,318,702

See accompanying notes to financial statements.

Spherix Incorporated

Consolidated Balance Sheets

ASSETS	June 30, 2009 (Unaudited)	December 31, 2008
Current assets		
Cash and cash equivalents	$ 6,392,955	$ 9,404,843
Short-term investments	1,599,346	1,894,434
Trade accounts receivable	339,356	281,342
Other receivables	6,142	37,223
Prepaid expenses and other assets	174,979	282,971
Total current assets	8,512,778	11,900,813
Property and equipment, net	261,952	310,365
Patents, net of accumulated amortization of $41,622 and $38,588	11,398	14,433
Deposit	35,625	35,625
Total assets	$ 8,821,753	$ 12,261,236
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 982,697	$ 710,881
Accrued salaries and benefits	230,524	304,756
Deferred revenue	96,316	39,347
Total current liabilities	1,309,537	1,054,984
Deferred compensation	585,000	660,000
Deferred rent	122,444	136,736
Total liabilities	2,016,981	1,851,720
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; 14,437,600 issued, and 14,357,162 shares outstanding at June 30, 2009 and December 31, 2008	72,188	72,188
Paid-in capital in excess of par value	27,618,366	27,602,486
Treasury stock, 80,438 shares, at cost at June 30, 2009 and December 31, 2008	(464,786)	(464,786)
Accumulated deficit	(20,420,996)	(16,800,372)
Total stockholders' equity	6,804,772	10,409,516
Total liabilities and stockholders' equity	$ 8,821,753	$ 12,261,236

See accompanying notes to financial statements.

Spherix Incorporated

Consolidated Statements of Cash Flows
(Unaudited)

	Six Months Ended June 30,	
	2009	**2008**
Cash flows from operating activities		
Net loss	$(3,620,624)	$(3,112,507)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	45,349	34,047
Loss (gain) on disposal of assets	5,599	(14,701)
Stock-based compensation	15,880	30,880
Changes in assets and liabilities:		
Accounts receivable	(58,014)	(236,651)
Other receivables	31,081	78,566
Prepaid expenses and other assets	107,992	160,453
Accounts payable and accrued expenses	197,584	(685,927)
Deferred rent	(14,292)	(6,573)
Deferred compensation	(75,000)	(4,000)
Deferred revenue	56,969	10,831
Net cash used in operating activities	(3,307,476)	(3,745,582)
Cash flow from investing activities		
Purchases of short-term investments	-	(4,054,076)
Proceeds from the maturity of short-term investments	295,088	-
Purchases of property and equipment	-	(179,203)
Proceeds from the sale of fixed assets	500	15,187
Net cash provided by (used in) investing activities	295,588	(4,218,092)
Cash flows from financing activities		
Net change in book overdraft	-	50,370
Net cash provided by financing activities	-	50,370
Net decrease in cash and cash equivalents	(3,011,888)	(7,913,304)
Cash and cash equivalents, beginning of period	9,404,843	15,839,959
Cash and cash equivalents, end of period	$ 6,392,955	$ 7,926,655

See accompanying notes to financial statements.

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 June 30, 2009, the results of its operations for the three-month and six-month periods ended June 30, 2009 and 2008, and its cash flows for the six-month periods ended June 30, 2009 and 2008. 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, 2008.

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 now in the name of Spherix Consulting, Inc. and the Company's patents and other assets and operations are in the process of being transferred into the name of Biospherics Incorporated. The subsidiaries began operations on January 1, 2009. Spherix now provides management, strategic guidance, business development, marketing and other services to its subsidiaries.

2. 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.

3. New Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. The effective date of nonfinancial assets and nonfinancial liabilities was deferred to fiscal years beginning after November 15, 2008; all other provisions of the pronouncement became effective January 1, 2008. The adoption of this Statement did not have a material impact on the Company's financial position, results of operations or cash flows.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS 159"). SFAS 159 permits entities to choose to measure many financial assets and liabilities at fair value. The fair value option may be applied, subject to certain exceptions, on an instrument-by-instrument basis, is irrevocable, and is applied only to entire instruments and not to portions of instruments. SFAS 159 is effective for our fiscal year beginning January 1, 2008. The adoption of this Statement did not have a material impact on the Company's financial position, results of operations or cash flows.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 141 (revised 2007) "Business Combinations" ("SFAS 141R"). SFAS 141R establishes principles and requirements in accounting for business combinations. We have adopted SFAS 141R for our fiscal year beginning January 1, 2009. The adoption of SFAS 141R did not have a material impact on our financial position, results of operations or cash flows.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, "Disclosures about Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 requires enhanced disclosures about an entity's derivative and hedging activities. We have adopted SFAS 161 for

our fiscal year beginning January 1, 2009. The adoption of SFAS 161 did not have a material impact on our financial position, results of operations or cash flows.

In April 2009, FASB issued Staff Position No. 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP 107-1 and APB 28-1"). The FSP amends FASB Statement No. 107, "Disclosures about Fair Value of Financial Instruments" to require disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. The FSP also amends Accounting Principles Board Opinion No. 28, "Interim Financial Reporting" to require those disclosures in summarized financial information at interim reporting periods. The new standard became effective for interim reporting periods ending after June 15, 2009. The adoption of FSP No. 107-1 and APB 28-1 did not have a significant impact on the Company's consolidated financial statements.

In May 2009, the FASB issued Statement of Financial Accounting Standards No. 165, “Subsequent Events” (“SFAS 165”), to incorporate the accounting and disclosure requirements for subsequent events into U.S. generally accepted accounting principles. SFAS 165 introduces new terminology, defines a date through which management must evaluate subsequent events, and lists the circumstances under which an entity must recognize and disclose events or transactions occurring after the balance-sheet date. The Company adopted SFAS 165 as of June 30, 2009, which was the required effective date. The Company evaluated its June 30, 2009 financial statements for subsequent events through August 14, 2009, the date the financial statements were issued. The Company is not aware of any subsequent events which would require recognition or disclosure in the financial statements.

4. Short-term Investments

The Company’s short-term investments consist of investments in debt securities, which mature in one year or less, and are valued at amortized cost, which approximates fair value.

5. Fair Value Measurements

Effective January 1, 2008, the Company adopted Statement of Financial Accounting Standards No. 157 *Fair Value Measurements,* (“SFAS 157”), to value its financial assets measured at fair value and effective January 1, 2009, the Company adopted SFAS 157 to value its non-financial assets measured at fair value. At June 30, 2009, the Company had no financial liabilities.

The following table presents the Company’s assets measured at fair value as of June 30, 2009, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs are unobservable data points for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability:

		Fair Value Measurement Using		
Description	**Fair Value at June 30, 2009**	**Quoted Prices in Active Markets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Debt securities	$1,599,000	$1,599,000	$ -	$ -

SFAS No. 159 *The Fair Value Option for Financial Assets and Financial Liabilities,* was also effective at the beginning of the Company’s 2008 fiscal year. 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, accounts payable and debt which are reported at historical value. The fair value of these financial assets and liabilities approximate their fair value because of their short duration.

6. 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 June 30, 2009, none of the Company's 40,500 outstanding options 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.

7. Accounting for Stock-Based Compensation

For the three- and six-months ended June 30, 2009, the Company recognized $3,000 and $7,000 in stock-based compensation expense relating to 59,000 stock options awarded in February 2006.

For the three- and six-months ended June 30, 2009, the Company recognized $5,000 and $9,000 in stock-based compensation expense relating to 30,000 shares in restricted stock the Company granted in August 2007 to its Chief Executive Officer.

A summary of option activity under the Company's employee stock option plan for the six months ended June 30, 2009, is presented below:

Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2008	40,500	$ 2.57		
Granted	-	$ -		
Exercised	-	$ -		
Expired or forfeited	-	$ -		
Outstanding at June 30, 2009	40,500	$ 2.57	1.3	$ -
Exercisable at June 30, 2009	39,000	$ 2.59	1.3	$ -

As of June 30, 2009, there were 1,500 unvested options to purchase common stock under the plans. An estimated compensation cost of $8,000 related to these unvested options is expected to be recognized over the next year.

8. Income Taxes

The American Recovery and Reinvestment Act of 2009 was enacted and signed into law on February 17, 2009. The Act includes the extension of a provision passed by the United States Congress in 2008 which allows companies to accelerate the recognition of a portion of certain credits in lieu of bonus depreciation and convert the credit carryforward into currently refundable credits. The Company is evaluating the provisions of the Act but has not yet reached a decision whether it will apply any of the provisions.

9. 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 six months ended June 30, 2009 and 2008 is summarized below:

		Three Months Ended June 30, 2009	Three Months Ended June 30, 2008	Six Months Ended June 30, 2009	Six Months Ended June 30, 2008
Revenue	Biospherics	$ -	$ 5,000	$ -	$ 5,000
	Health Sciences	332,000	258,000	693,000	401,000
	Total revenue	$ 332,000	$ 263,000	$ 693,000	$ 406,000
Operating (Loss) Income and Loss Before Income Taxes	Biospherics	$(1,202,000)	$ (722,000)	$(2,828,000)	$(1,878,000)
	Health Sciences	186,000	125,000	349,000	145,000
	General	(544,000)	(690,000)	(1,172,000)	(1,605,000)
	Total operating loss	(1,560,000)	(1,287,000)	(3,651,000)	(3,338,000)
	Interest income	5,000	88,000	30,000	225,000
	Loss from operations before income taxes	$(1,555,000)	$(1,199,000)	$(3,621,000)	$(3,113,000)

		June 30, 2009	Dec 31, 2008
Identifiable Assets	Biospherics	$ 11,000	$ 21,000
	Health Sciences	340,000	296,000
	General corporate assets	8,471,000	11,944,000
	Total assets	$ 8,822,000	$12,261,000

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, 2008, 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 principal 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. The Health Sciences segment was started in July 2007.

Biospherics engages in product development of tagatose. The Company's focus is on the non-food uses of tagatose, marketed under the name "Naturlose". Our efforts have been to explore whether Naturlose is an effective treatment for Type 2 diabetes, as a prospective first-in-class drug candidate.

The Company is conducting two clinical trials, a Phase 3 clinical trial on the efficacy of Naturlose as a treatment for Type 2 diabetes under a Food and Drug Administration ("FDA") Investigational New Drug ("IND") application process, and a Phase 2 Dose Range trial to evaluate the effectiveness of lower doses of Naturlose in treating Type 2 diabetes. The primary endpoint in each study is a statistically significant decrease in hemoglobin A1c ("HbA1c") levels. The secondary endpoints are measured in fasting blood glucose, insulin, and lipid profiles, changes in body weight, and the proportion of subjects achieving HbA1c targets under 7% and/or under 6.5%. The Phase 3 trial is expected to be completed in mid- to late-2010 and the Dose Range trial is expected to be completed in mid-2010.

Based on the successful results from the first six-months of the Phase 2 trial, the Company anticipates conducting an interim analysis at the six-month point in the twelve-month Phase 3 trial. The Company expects to obtain interim analysis results from the Phase 3 trial on approximately 216 patients during the third quarter of 2009, which may provide the Company important preliminary insight into the efficacy of Naturlose as a treatment for Type 2 diabetes. The Phase 3 trial is being conducted at 21 active sites in the U.S. and 24 active sites in India; 451 patients have been randomized.

The Company is hopeful that as it proceeds with its developmental efforts, incremental successes may afford it the opportunity to raise additional capital and achieve a sale, license, partner, or other strategic alliance.

We believe tagatose depresses elevations of blood sugar levels by increasing glycogen synthesis while decreasing glycogen utilization resulting in an improvement of blood sugar control and modulation of HbA1c.

Preliminary data from the Dose Range study demonstrates reductions of HbA1c levels at doses lower than those used in the current Phase 3 trial. HbA1c is a key indicator of Type 2 diabetes that monitors glycated hemoglobin in the blood. The doses being tested are: 2.5, 5.0, and 7.5 g, which are administered orally with meals, three times daily. After 6 months on drug, patients in the 7.5 g group experienced an average reduction of 0.3% in HbA1c over those of the HbA1c of the 2.5 g group. Over the same period, the 5.0 g group averaged a reduction in HbA1c of 0.05% over those from the 2.5 g group. Naturlose appears to begin showing an effect on HbA1c within the range of doses selected for this minimum-dose study. The ongoing Phase 3 efficacy study is being conducted at a 15 g dose, and is powered to detect a 0.5% reduction in HbA1c.

Over the course of the Dose Range study, Naturlose also decreased the average serum triglycerides of the patients by -59 mg/dl by the end of the first month on therapy, a decrease from baseline that remained at -41 mg/dl by the end of the 6 months of the trial. Naturlose also decreased serum LDL by an average -13 mg/dl by the end of the first month on therapy, while serum HDL was essentially unchanged (+0.9 mg/dl). The LDL:HDL ratio was improved for two of the three dose groups by an average of 0.3.

Tagatose's safety in humans was established in 2001 when it received the designation as Generally Recognized As Safe ("GRAS") in foods by the FDA. The Phase 2 trial has provided further support that Naturlose is safe and well tolerated, with low rates of treatment-related adverse events noted at all doses. The most common adverse events reported in the Dose Range study were mild and gastrointestinal in nature. Previous studies have indicated that Naturlose does not stimulate insulin secretion.

Management believes the Dose Range interim data, combined with the fact that Naturlose is a naturally occurring compound with no known contraindications to current Type 2 diabetes treatments, provides a strong indication of Naturlose's potential as a treatment option for patients with Type 2 diabetes, as either a stand-alone or adjunct therapy.

In responding to the favorable Dose Range interim results, management is actively pursuing plans to accelerate and significantly increase its commercialization efforts for Naturlose. These plans include the formation of up to three regional Medical Advisory Boards, possibly as early as September 2009, as well as other commercialization and marketing efforts. The Company is also considering plans for a Pediatric Phase 2 clinical trial of Naturlose as a treatment for Type 1 diabetes to expand the potential market for the drug and extend marketing exclusivity protection six months at the end of the normal exclusivity period. In addition, an effective oral treatment for Type 1 diabetes would have a large market among Type 2 diabetic patients with high insulin resistance and beta cell exhaustion. Management believes that these actions will afford the Company a better opportunity to seek and obtain an appropriate strategic alliance.

The Company expects to incur substantial development costs in the next few years, without substantial corresponding revenue. The Company will continue to use the remaining net proceeds from the sale of InfoSpherix to continue the Phase 3 trial and the Dose Range trial. The Company is exploring issuing additional equity to provide funds for the additional commercialization/marketing described above and to provide any additional funds necessary to continue the development activities until one or more strategic alliances are in place.

Results of Operations for the Three and Six Months Ended June 30, 2009 and 2008

Revenue and Direct Costs

Revenue and direct contract costs for the three and six months ended June 30, 2009 are related to the Company's Health Sciences segment. Changes in revenue and direct costs between comparative periods reflect a combination of new contracts won and additional work on existing contracts. The effect, if any, that the current recession will have on future quarters is uncertain.

No substantial revenue from the Biospherics segment is expected until the Company is successful in selling or licensing its technology, which is unlikely to occur until the Company's Phase 3 trial is completed.

Research and Development

The clinical trials in the use of Naturlose for the treatment of Type 2 diabetes are the primary focus of the Biospherics segment. The R&D expenditures for 2009 and 2008 consisted of both the Phase 3 clinical trial and a related Dose Range study. The increase between years is related to the expansion of the Phase 3 trial to India and the related increase in the number of subjects participating in the trials. The Phase 3 trial is nearly fully enrolled with 451 patients randomized, with 21 active sites in the U.S. and 24 active sites in India. The Company expects to obtain interim analysis results from the Phase 3 trial during the third quarter of 2009, which may provide the Company important preliminary insight into the efficacy of Naturlose as a treatment for Type 2 diabetes. The Phase 3 trial will likely be completed in mid- to late-2010, based on current enrollment and retention numbers, and the New Drug Application ("NDA") could be filed as early as the end of 2010. The FDA review process typically takes between one and two years to complete. Approval of an NDA application is at the discretion of the FDA.

While the Company has primarily focused its efforts on developing Naturlose as a drug to treat Type 2 diabetes, the Company has also engaged in efforts to develop ancillary products. The Company's pipeline of compounds in preclinical research for use in conjunction with Naturlose for the treatment of the metabolic syndrome, atherosclerosis and obesity as well as diabetes includes:

- SPX 7233801 - an antioxidant that inhibits lipid peroxidation, COX-1 and COX-2, and stimulates insulin production
- SPX 8522876 - an antioxidant that inhibits COX-1 and COX-2.
- SPX 10624258, SPX 8818309, and SPX 8818440 - anti-oxidant and anti-inflammatory compounds

In June 2009, the Company received the first batch of FDA current Good Manufacturing Practice ("cGMP") tagatose, U.S. Pharmacopeia ("USP") grade. The tagatose will be used to satisfy the Chemistry, Manufacturing and Control ("CMC") requirements of its NDA to the FDA. A Drug Master File ("DMF") has been submitted to FDA and Spherix has a Letter of Authorization to refer to the DMF in its NDA. This and subsequent batches will also be used in the ongoing clinical trials.

Selling, General and Administrative

The decrease in selling, general and administrative costs for the six months ended June 30, 2009 from those of the prior year are primarily the result of relocating the Company's Headquarters to a smaller facility in April 2008 and lower overhead costs.

In response to the favorable results obtained from the Dose Range trial, management is actively considering plans to accelerate and significantly increase its marketing and commercialization efforts of Naturlose as a treatment for Type 2 diabetes. These plans include the formation of up to three regional Advisory Boards, possibly as soon as September 2009.

Interest

Interest income between years has decreased with the decrease in funds available for investing and the lower rates of return available in the market.

Liquidity and Capital Resources, Consolidated

Working capital as of June 30, 2009, was $7.2 million, which represents a $3.6 million decrease from working capital at December 31, 2008. R&D and marketing activity related to the commercialization of Naturlose accounted for approximately $2.8 million of the decrease in working capital.

The Company is operating the Biospherics efforts solely from the net proceeds received from the 2007 sale of InfoSpherix. The Health Sciences segment is not expected to generate any substantial excess cash flow in the next twelve (12) months.

Spherix is looking to accelerate and significantly expand its marketing and commercialization activity related to Naturlose. If the Company is successful in securing sufficient financing, it expects to expend approximately $10 million over the next twelve months, including $7 million in costs on the clinical trials and marketing activity related to the commercialization of Naturlose. The Phase 3 clinical trial is expected to be completed in mid- to late-2010 and the Dose Range trial in mid-2010. The Company intends to finance the Biospherics activities through proceeds received from the 2007 sale of InfoSpherix, as well as funds it seeks to raise through the sale of stock. While the Company completes its Phase 3 trial, it is taking steps to prepare for commercialization of Naturlose as a treatment for Type 2 diabetes on the assumption that the trial will be successful. These steps include the Dose Range trial, exploring manufacturing alternatives and seeking marketing assistance. The Company is hopeful that as it proceeds with its developmental efforts, incremental successes may afford it the opportunity to raise additional capital and achieve a sale, license, partner, or other strategic alliance. Our preliminary marketing analysis suggests that we may increase our chances of success by engaging in directed marketing efforts as we proceed with the Phase 3 trial.

Continued progress on the clinical trial of Naturlose as a treatment of Type 2 diabetes and on the other initiatives described above is dependent upon many factors including, but not limited to, the Company having sufficient funds and resources. The Company has not had, and does not expect to have, any meaningful offers to buy or license the rights to use Naturlose as a treatment for Type 2 diabetes until the efficacy of Naturlose has been further established. To complete the Phase 3 trial, then prepare, submit and pursue the FDA NDA, and take the other steps necessary to bring Naturlose to market as a Type 2 diabetes drug, the Company will need to raise additional funds.

The total cost of completing the Phase 3 trial is difficult to determine and can be affected by any number of factors including, but not limited to, the time to complete the trial. No guarantee can be given that the Company will be successful in its efforts to raise additional funds and, as many of our costs are “fixed,” any additional delays in the Phase 3 trial could cause us to expend all of our funds before the trial is complete.

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 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 June 30, 2009.

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, 2008, 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

Spherix Incorporated

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: August 14, 2009

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

Date: August 14, 2009

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 quarterly 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 annual 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 annual 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 annual 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
August 14, 2009

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 quarterly 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 annual 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 annual 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 annual 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
August 14, 2009

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 Quarterly Report on Form 10-Q for the period ended June 30, 2009 (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
August 14, 2009

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 Quarterly Report on Form 10-Q for the period ended June 30, 2009 (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
August 14, 2009

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.